6712-01

#### FEDERAL COMMUNICATIONS COMMISSION

**47 CFR Part 11** 

[EB Docket No. 04-296; FCC 12-7]

Review of the Emergency Alert System.

**AGENCY:** Federal Communications Commission.

**ACTION:** Final Rule.

**SUMMARY:** In this document, the Federal Communications Commission (Commission) amends its rules governing the Emergency Alert System (EAS) to codify the obligation to process alert messages formatted in the Common Alerting Protocol (CAP) and to streamline and clarify these rules generally to enhance their effectiveness.

**DATES:** Effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], except for 47 CFR 11.21(a), 11.33(a)(4), 11.41(b), 11.42, 11.54(b)(13), and 11.55, which contain information collection requirements that have not been approved by the Office of Management and Budget (OMB). The incorporation by reference of certain publications listed in this rule is approved by the Director of the Federal Register as of [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. The Commission will publish a document in the Federal Register announcing the effective date of those paragraphs and rule amendments.

FOR FURTHER INFORMATION CONTACT: Lisa Fowlkes, Deputy Bureau Chief, Public Safety and Homeland Security Bureau, at (202) 418-7452, or by email at Lisa.Fowlkes@fcc.gov. For additional information concerning the Paperwork Reduction Act information collection requirements contained in this document, contact Judy Boley Hermann at (202) 418-0214 or send an email to PRA@fcc.gov.

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's Fifth Report and Order (Fifth Report and Order) in EB Docket No. 04-296, FCC 12-7, adopted on January 9,

2012, and released on January 10, 2012. The full text of this document is available for inspection and copying during normal business hours in the FCC Reference Center (Room CY-A257), 445 12th Street, SW., Washington, DC 20554. The complete text of this document also may be purchased from the Commission's copy contractor, Best Copy and Printing, Inc., 445 12th Street, SW., Room, CY-B402, Washington, DC 20554. The full text may also be downloaded at: www.fcc.gov.

## Synopsis of the Fifth Report and Order

1. In the <u>Fifth Report and Order</u>, the Commission adopts several changes to its Part 11 Emergency Alert System (EAS) rules to more fully codify the Common Alerting Protocol (CAP)-related obligations initially adopted in the Second Report and Order (<u>Second Report and Order</u>) in EB Docket No. 04-296, 72 FR 62123 (Nov. 2, 2007), and to eliminate outdated rules to improve Part 11's overall effectiveness. The rule amendments and other decisions taken in this <u>Fifth Report and Order</u> are predicated upon the Third Further Notice of Proposed Rulemaking (<u>Third FNPRM</u>) in EB Docket No. 04-296, 76 FR 35810 (June 20, 2011), adopted by the Commission on May 25, 2011.

## I. Background

2. The present-day EAS is a hierarchical alert message distribution system that utilizes radio and television broadcasters, cable service providers, and other regulated entities (collectively known as EAS Participants) to transmit audio and/or visual emergency alert messages to the public. To initiate an EAS message, whether at the national, state, or local levels, the message originator must format a message in the EAS Protocol, which is identical to the Specific Area Message Encoding (SAME) digital protocol utilized by National Weather Service (NWS) (hereinafter, "EAS Protocol" and "SAME" are used interchangeably), and send the formatted alert to a designated entry point within the EAS network for delivery to specialized equipment maintained and operated by EAS Participants that can receive (and decode) the alert

for transmission over the EAS Participants' facilities to their end users.

- 3. In 2007, the Commission adopted the Second Report and Order in this docket, which revised the Commission's Part 11 EAS rules to lay the foundation for a state-of-the-art, next-generation national EAS (Next Generation EAS). First, to ensure the efficient, rapid, and secure transmission of EAS alerts in a variety of formats (including text, audio, and video) and via different means (broadcast, cable, satellite, and other networks), the Commission required that EAS Participants be capable of receiving CAP-formatted alert messages no later than 180 days after the Federal Emergency Management Agency (FEMA) publicly publishes its adoption of the CAP standard. Second, the Commission required EAS Participants to adopt Next Generation EAS delivery systems no later than 180 days after FEMA publicly releases standards for those systems. Third, the Commission required EAS Participants to transmit state and local EAS alerts that are originated by governors or their designees no later than 180 days after FEMA publishes its adoption of the CAP standard, provided that the state has a Commission-approved State Area EAS Plan that provides for delivery of such alerts.
- 4. CAP is an open, interoperable XML-based standard, developed within the Organization for the Advancement of Structured Information Standards (OASIS) standards process, which permits links to voice, audio or data files, images, multilingual translations of alerts, and links providing further information. Although CAP and SAME both convey data, the two protocols function in entirely different ways. CAP essentially represents an envelope into which data is packaged according to predetermined fields and packetized for transmission over various IP-based mediums, such as the Internet. The SAME protocol is designed to combine specific codes that identify alert data (*e.g.*, type, origin, and area affected) with an audio message, which are modulated onto an RF signal using the audio frequency-shift keying (AFSK) modulation scheme (this process is referred to as "encoding").
  - 5. On March 25, 2010, in anticipation of FEMA's adoption of CAP, the

Commission's Public Safety and Homeland Security Bureau (Bureau) released a Public Notice (Part 11 Public Notice) in EB Docket No. 04-296, DA 10-500, released on March 25, 2010, that sought informal comment regarding what, if any, Part 11 changes might be necessitated by the introduction of CAP. On October 7, 2010, the Communications Security, Reliability, and Interoperability Council (CSRIC), which had been established by the Commission to, among other things, recommend revisions to the Part 11 rules in light of FEMA's then-pending adoption of CAP, adopted a Final Report, which included a number of recommendations for revisions to the Part 11 rules related to the obligation to accept CAP-formatted messages.

- 6. On September 30, 2010, FEMA announced its adoption of technical standards and requirements for CAP-formatted EAS alerts. Specifically, FEMA identified three documents as defining the FEMA Integrated Public Alert and Warning System (IPAWS) technical standards and requirements for CAP and its implementation: (1) the OASIS CAP Standard v1.2; (2) an IPAWS Specification to the CAP Standard (CAP v1.2 IPAWS USA Profile v1.0); and (3) the EAS-CAP Industry Group's (ECIG) Recommendations for a CAP-EAS Implementation Guide, Version 1.0 (May 17, 2010) (ECIG Implementation Guide). FEMA's announced adoption of CAP v1.2 triggered an initial deadline for EAS Participants to be able to receive CAP alerts by March 29, 2011.
- 7. On November 18, 2010, in response to the recommendations in CSRIC's Final Report, as well as to comments submitted in response to the Part 11 Public Notice, the Commission adopted an order in EB Docket No. 04-296, FCC 01-191, that extended the 180-day deadline for meeting the CAP-related obligations until September 30, 2011 (the Waiver Order). On May 25, 2011, the Commission adopted the Third FNPRM, which sought comment on several proposed changes to the EAS rules to more fully codify the CAP-related obligations adopted in the Second Report and Order, and to eliminate outdated rules to improve Part 11's overall effectiveness, and is the basis for the decisions taken in the Fifth Report and Order. On

September 15, 2011, the Commission adopted the Fourth Report and Order (Fourth Report and Order) in EB Docket No. 04-296, 76 FR 80780 (Dec. 27, 2011), which amended section 11.56 of the EAS rules to require EAS Participants to be able to receive CAP-formatted EAS alerts no later than June 30, 2012.

#### II. Discussion

- 8. The <u>Fifth Report and Order</u> adopts changes to the Part 11 rules to fully effectuate the CAP-related obligations adopted in the <u>Second Report and Order</u>, as well as other rule changes and clarifications intended to streamline Part 11 and generally enhance the overall effectiveness of the EAS, based upon the rule changes and clarifications proposed in the <u>Third</u> <u>FNPRM</u>. The specific rule changes adopted in the <u>Fifth Report and Order</u> are included in the rules section.
- 9. The rule changes and other decisions taken in the <u>Fifth Report and Order</u> in response to the <u>Third FNPRM</u> are summarized below. Because the <u>Fifth Report and Order</u> does not impose new obligations but primarily details the manner in which EAS Participants must implement the CAP requirement, the rules and other decisions adopted in the <u>Fifth Report and Order</u> impose minimal new costs, particularly as many EAS Participants have already purchased and installed CAP-compatible EAS equipment. In many cases, these rule changes will result in decreased costs.

#### A. Scope of CAP-Related Part 11 Revisions

10. The Commission adopts the transitional approach for implementing CAP within the EAS set forth in the Third FNPRM. Specifically, the Commission explains that the CAP-related changes to Part 11 it adopts in the Fifth Report and Order are limited to ensuring that EAS Participants' EAS equipment will be capable of receiving and converting CAP-formatted messages into a SAME-compliant message. The Commission clarifies that EAS Participant stations that are generally charged with encoding (or regenerating) the EAS Protocol codes (as

AFSK tones) for the benefit of downstream stations monitoring their transmissions will continue that function with respect to alert messages they receive in the CAP format – just as they would for alert messages they receive in the SAME format. However, the Commission explains, they will be generating the AFSK tones based upon the relevant EAS Protocol codes contained within the CAP message, in conformance with the ECIG Implementation Guide, including the audio message contained in the CAP message, to the extent required under the Part 11 rules. As part of this transitional approach, the Commission also requires EAS Participants to create video crawls based upon the enhanced text contained within the CAP message to the extent that such text files are provided by the alert initiator, in conformance with the relevant procedures set forth in the ECIG Implementation Guide.

11 The Commission concludes that this transitional approach is warranted, primarily because switching over to a fully CAP-centric EAS system – where EAS messages are inputted and outputted in CAP format rather than SAME format – at this time is technically infeasible and premature, because no such CAP-centric system has been developed. The Commission further concludes that this transitional approach makes sense because the many benefits of maintaining the legacy EAS previously outlined by the Commission in the Second Report and Order continue to be relevant today. In addition, the Commission observes that FEMA has indicated that the legacy EAS will continue to provide a nationwide alerting mechanism as part of its IPAWS system, and FEMA's adoption of the standards necessary for formatting alert messages into CAP and translating such CAP-formatted messages into SAME-compliant messages establishes the groundwork for implementing CAP-formatted alert initiation within the existing EAS system. The Commission further observes that the record indicates that EAS equipment manufacturers have designed and have been marketing CAP-enabled equipment that conforms to these FEMAadopted standards, and a significant percentage of EAS Participants already have procured or contracted for such equipment, making this transitional approach both practical and cost-efficient.

# B. Obligation to Accept CAP Messages

- 12. <u>CAP-Formatted Message Conversion to SAME</u>. The Commission adopts its tentative conclusion in the <u>Third FNPRM</u> to amend § 11.56 to require EAS Participants to convert CAP-formatted EAS messages into SAME-compliant EAS messages in accordance with the ECIG Implementation Guide, except for its provisions on text-to-speech and gubernatorial CAP messages. The Commission observes that adopting the ECIG Implementation Guide as the standard for translating CAP-formatted messages into SAME-compliant messages will harmonize CAP elements with the Part 11 rules, thus ensuring that CAP-formatted EAS messages are converted into SAME-compliant messages in a consistent, cost-efficient manner across devices and delivery platforms. The Commission also observes that adoption of this requirement has broad support in the record.
- 13. The Commission notes that FEMA has adopted the ECIG Implementation Guide as its benchmark for processing IPAWS-distributed CAP-formatted messages to the EAS, and many manufacturers have already designed EAS equipment that conforms to the ECIG Implementation Guide, as demonstrated by their having completing requirements of FEMA's IPAWS Conformity Assessment Program. The Commission also observes that successful completion of FEMA's IPAWS Conformity Assessment Program can be used to demonstrate ECIG Implementation Guide compliance for purposes of obtaining FCC certification.

  Accordingly, the Commission finds that the costs of complying with the ECIG Implementation Guide are minimal.
- 14. The Commission clarifies that it will not permit EAS Participants to adhere to the ECIG Implementation Guide's provisions on text-to-speech. The Commission finds that, although use of text-to-speech technology has some support in the record, there are also concerns in the record about whether text-to-speech software is sufficiently accurate and reliable to deliver consistently accurate and timely alerts to the public. The Commission also observes that allowing

the text-to-speech conversion to be resolved by EAS equipment software, as opposed to text-to-speech software that the alert message originator might employ, could result in differing audio messages being broadcast for the same EAS message, depending upon which software brand and version a given equipment manufacturer elected to incorporate into its EAS equipment. The Commission concludes that discussion of text-to-speech and speech-to-text software is best reserved for a separate proceeding, and therefore defers these issues at this time. Finally, the Commission notes that because it is eliminating the mandate to process CAP-formatted messages initiated by state governors, the issue of conformance with the provisions in the ECIG Implementation Guide to effect that mandate are moot.

15 <u>CAP-Related Monitoring Requirements</u>. The Commission amends § 11.52 of its rules to include a requirement that EAS Participants' EAS equipment must interface with and monitor (whether through "pull" interface technologies, such as Really Simple Syndication (RSS) and Atom Syndication Format (ATOM), or "push" interface technologies, such as instant messaging and e-mail) the IPAWS system to enable distribution of federal CAP-formatted alert messages from IPAWS to the EAS Participants' EAS equipment. Whereas the Commission had initially proposed in the Third FNPRM to require that EAS Participants monitor FEMA's IPAWS RSS feed(s) for federal CAP-formatted messages, it concludes that it is unrealistic to require that EAS Participants adhere to a specific technical standard for CAP monitoring. The Commission also observes that the technical parameters of the IPAWS system are still evolving – and the digital world in which that system operates is evolving faster still. The Commission finds that trying to keep up with these changes while specifying the technical requirements for federal CAP monitoring in the Part 11 rules is neither practical nor administratively efficient. In this regard, the Commission observes that FEMA changed the methodology for distributing CAP messages from its IPAWS system to the EAS from RSS to ATOM shortly after the Third FNPRM's adoption. The Commission also finds that the flexible approach to monitoring adopted in the

<u>Fifth Report and Order</u> will benefit equipment manufacturers by allowing them to update their equipment designs as federal CAP message delivery mechanisms and technology evolve.

- 16. Because the Commission in the Fifth Report and Order eliminates the obligation to receive and process gubernatorial CAP-formatted messages, it does not establish a generally applicable requirement for state CAP message monitoring. The Commission clarifies that the monitoring requirements associated with CAP messages initiated via state (and local) EAS systems will be determined just as the monitoring requirements for SAME-based EAS message transmissions always have been. Specifically, the Commission indicates that state (and local) alerting authorities, working with EAS Participants, will develop state (and local) CAP alert monitoring requirements and set these forth in their State EAS Plans, to be submitted to and approved by the Commission.
- 17. Next Generation Distribution Systems. In the Second Report and Order, the Commission stated that "should FEMA announce technical standards for any Next Generation EAS alert delivery system, EAS Participants must configure their networks to receive CAP-formatted alerts delivered pursuant to such delivery system, whether wireline, Internet, satellite or other, within 180 days after the date that FEMA announces the technical standards for such Next Generation EAS alert delivery." In the <a href="Third FNPRM">Third FNPRM</a>, the Commission interpreted this language as being intended to put EAS Participants on notice that, should FEMA adopt technical standards covering delivery of CAP-formatted messages to EAS Participants over specific platforms, such as satellite systems, EAS Participants would ultimately need to configure their systems to be able to interface with such systems to meet their existing obligation to process CAP-formatted messages.
- 18. In the <u>Fifth Report and Order</u>, the Commission adopts the interpretation of the language from the <u>Second Report and Order</u> regarding receipt of CAP-formatted messages from Next Generation EAS delivery systems that it stated in the <u>Third FNPRM</u>. Accordingly, the

Commission concludes that if FEMA were to announce technical standards for any Next Generation EAS alert delivery system for delivering CAP-formatted alerts, the Commission would seek to amend Part 11 to require that EAS Participants be capable of receiving such alerts. The Commission observes that it has no expectations as to how or whether FEMA may adopt standards and requirements for new message and delivery mechanisms that would modify existing requirements. The Commission instead merely clarifies that: (i) any such standards or requirements cannot be enforced with respect to EAS Participants until the requirements are formally integrated into the Part 11 rules via the rulemaking process, and (ii) it would seek to initiate such a rulemaking process in a timely manner, with the goal of making compliance with such standards or requirements effective within 180 days of their formal adoption.

- 19. <u>Equipment Requirements</u>. The <u>Fifth Report and Order</u> contains several CAP-related decisions related to EAS equipment, as summarized below.
- stand-alone devices that carry out the functions of monitoring for, receiving, and decoding CAPformatted messages and converting such messages into a format that can be inputted into a
  separate, stand-alone legacy EAS device to produce an output that complies with the Part 11
  rules. The Commission observes that the record indicates that there are two types of intermediary
  devices, which may generally be described as "universal" intermediary devices and "component"
  intermediary devices. The Commission explains that universal intermediary devices monitor,
  acquire, and decode CAP messages, using the relevant CAP data to generate (i.e., encode) the
  EAS codes (FSK audio tones) and, if present, an audio message, which can be inputted into
  legacy EAS devices. The Commission further explains that because the SAME-formatted
  message output of the universal intermediary device is functionally equivalent to a SAMEformatted message delivered over the air, it theoretically should be interoperable with all or most
  legacy EAS decoders. The Commission adds, however, that because the output of the universal

intermediary device is limited to the EAS Protocol – which is all that the legacy EAS device can process – the configuration of a universal intermediary device and legacy EAS device can only generate a SAME-compliant message; it cannot, for example, use the enhanced CAP text for generating a visual display.

- 21. The Commission explains that component intermediary devices, by contrast, are designed to interoperate with specific legacy EAS device models. The Commission observes that component intermediary devices also monitor for, acquire, and decode CAP messages, but are designed to enhance the function of specific legacy EAS devices. As a result, the Commission explains, the output of the combined system configuration of these devices is capable of more than simply generating a SAME-compliant message. The Commission observes that the record indicates that such configurations may permit the use of the enhanced CAP text to meet the visual display requirements in §§ 11.51(d), (g)(3), (h)(3), and (j)(2).
- 22. The Commission observes that, according to the record, "integrated CAP-capable EAS devices" <u>i.e.</u>, self-contained, stand-alone devices that combine the CAP-related functions of decoding CAP-formatted messages and converting such messages into a SAME-compliant output and processing SAME-formatted messages as encoders and decoders in accordance with the Part 11 rules can be updated via software or firmware to comply with any future changes that might be incorporated into the Part 11 rules, the CAP standard, or the ECIG Implementation Guide. The Commission also observes, however, that it is unclear whether or to what extent a combined system configuration of a component intermediary device and its companion legacy EAS device model could be similarly updated.
- 23. Based on the record and the transitional approach it adopts for this proceeding, the Commission concludes that it will allow EAS Participants to meet the CAP-related obligations adopted in the <u>Fifth Report and Order</u> by using intermediary devices in tandem with their existing legacy EAS equipment, provided that such configuration can comply with the revised

certification requirements adopted in the <u>Fifth Report and Order</u> as well as with any applicable Part 11 requirements we may adopt in the future. The Commission further concludes, however, that because it is requiring that EAS Participants utilize the enhanced text in a CAP message to provide a visual display, as set forth in § 3.6 of the ECIG Implementation Guide, it will require that any intermediary devices provide such functionality by June 30, 2015, which is three years from the June 30, 2012, deadline for overall CAP compliance.

- 24. The Commission finds that this approach for intermediary devices is consistent with its baseline goal of ensuring that alert messages formatted pursuant to the CAP-related standards adopted by FEMA will be converted into and outputted as SAME-compliant messages. The Commission observes that the record indicates that intermediary devices offer a less costly way to meet the requirements adopted in the Fifth Report and Order, and that some percentage of EAS Participants already have purchased and deployed intermediary devices. The Commission observes that not authorizing the use of intermediary devices would result in significant equipment replacement, installation, and training costs for these EAS Participants. The Commission finds that, assuming these intermediary devices can meet the certification and other requirements adopted in the Fifth Report and Order, imposition of the costs associated with the purchase of replacement EAS equipment is unnecessary and unjustified. The Commission also observes that intermediary devices will be required to meet the same requirements and provide the same capabilities as integrated CAP-capable EAS devices, thus putting them on an equal footing.
- 25. With respect to its decision to require intermediary devices to be capable of utilizing the enhanced text in a CAP message to provide a visual display, as set forth in § 3.6 of the ECIG Implementation Guide, by June 30, 2012, the Commission recognizes that it will likely be technically unfeasible for universal intermediary devices (and possibly some component intermediary devices), as well as the legacy EAS devices with which they are configured, to meet

this requirement. The Commission acknowledges that, as a result, non-conforming equipment would have to be replaced, but concludes that any costs associated with such replacement are consistent with those that EAS Participants may expect in the normal course of business, particularly as much of the underlying legacy equipment upon which intermediate devices depend is old and will soon need to be replaced. The Commission finds that the approximately three and one half-year window it is providing for intermediary device users is sufficient to allow EAS Participants to finish depreciating and then replace this aging legacy EAS equipment and to allow equipment manufacturers time to develop possible workarounds to allow intermediate devices to become compliant with the revised rules. The Commission also observes that among the benefits that CAP-compliant equipment will bring is an EAS that is more accessible to all Americans, including Americans with disabilities, who will directly benefit from this new requirement.

- 26. Section 11.32(a). The Commission concludes that it is unnecessary to make any changes to the minimum encoder requirements set forth in § 11.32(a) regarding CAP-to-SAME conversion. The Commission observes that the conversion of CAP-to-SAME is primarily a decoding function that CAP-compliant EAS equipment is designed to perform. The Commission further observes that it is not requiring encoders to encode anything other than the relevant EAS Protocol elements described in §.31 that they have always been required to encode, and that this is the case regardless of whether the relevant EAS Protocol elements are derived from a CAP-formatted message or a SAME-formatted message.
- 27. Section 11.32(a)(2) and (a)(3). The Commission revises the encoder input port configuration requirements in § 11.32(a)(2) to require that encoders be configured with at least one audio input port and at least one data input port. The Commission also deletes as unnecessary references to RS232-C and 1200 baud rate, which manufacturers may continue to make available, if they so desire. The Commission concludes that decisions concerning the total number and types of data input ports configured into encoders are best left to equipment

manufacturers, so that they can respond to the monitoring requirements of the CAP systems with which EAS equipment may interface (such as IPAWS and state CAP systems), changes in technology, and costs of compliance. The Commission also finds that, for the sake of consistency with its transitional approach, the input configuration requirements should continue to require audio and data connectivity. Finally, the Commission applies the minimal requirement of at least one audio port and at least one data port to the encoder output port configuration requirements in § 11.32(a)(3), because it finds that the rationale above applies equally to the output ports and the record strongly supports such application.

- 28. Section 11.33(a). The Commission revises the minimum requirements for decoders in § 11.33(a) of the Commission's rules to include the capability to decode CAP-formatted messages and convert them into SAME protocol-compliant messages, as set forth in § 11.56 and clarify that this requirement can be met through the deployment of an intermediary device. The Commission observes that the fundamental purpose of decoders is to ingest and process EAS messages, whether formatted in the SAME or CAP protocols, and adding CAP reception to § 11.33(a) will put CAP on the same footing as SAME. The Commission also finds it appropriate to clarify in § 11.33(a) that intermediary devices may be used to meet the fundamental decoder requirement of converting CAP messages into SAME-compliant messages.
- 29. Section 11.33(a)(1) and (a)(7). For the same reasons described above with respect to encoder input configuration requirements, the Commission revises the decoder input configuration requirements in § 11.33(a)(1) to require at least one data input port (this section already requires the capability to receive "at least two audio inputs"). The Commission also deletes as unnecessary any references to RS232-C and 1200 baud. The Commission revises the decoder output configuration requirements in § 11.33(a)(7) to reflect these changes.
- 30. <u>Section 11.33(a)(4)</u>. The Commission amends § 11.33(a)(4) to include selective display and logging of the text that was compiled from CAP-formatted messages. The

Commission finds that this revision is necessary to harmonize CAP-formatted message processing with SAME-formatted message processing. The Commission observes that its decision is supported by EAS equipment manufacturers, the industry affected by the rule revision, and that the revision imposes no additional technical obligations or costs either to these manufacturers or to EAS Participants.

- 31. Section 11.33(a)(10). The Commission adopts its tentative conclusion set forth in the Third FNPRM to decline CSRIC's recommendation to revise § 11.33(a)(10) to require use of the CAP-formatted message where a duplicate SAME-formatted message was also received. The Commission observes that the ECIG Implementation Guide includes a process for handling CAP messages where a duplicate SAME-formatted message also has been received, which prefers (but does not require) use of the CAP version. The Commission also observes that it is requiring CAP-to-SAME conversion in conformance with the ECIG Implementation Guide, which should satisfy the underlying thrust of CSRIC's recommendation.
- 32. Section 11.33(a)(11). The Commission revises § 11.33(a)(11) to ensure that EAN messages receive priority over all other EAS messages, regardless of whether the EAN message was received via the audio port or data port, or was formatted in SAME or CAP. The Commission finds that this action is necessary because as currently written, § 11.33(a)(11) could be interpreted to require a preference for SAME-formatted EAN messages received via over-the-air broadcast monitoring over duplicate CAP versions of the same message received via the data input port. The Commission also finds that such action is necessary to ensure that EAS equipment consistently gives EANs priority, regardless of how it receives them.
- 33. <u>Miscellaneous Rule Changes Related to Fully Implementing CAP</u>. The <u>Fifth</u>

  Report and Order contains several CAP-related decisions related to more fully implementing

  CAP within Part 11, as summarized below.
  - 34. <u>Section 11.1</u>. The Commission concludes that the existing language defining the

purpose of the EAS in § 11.1, which covers federal, state, and local government users, and their designees, is broad enough to capture all authorized users of the EAS, whether they initiate SAME-formatted messages or CAP-formatted messages. Accordingly, the Commission declines CSRIC's recommendation to revise § 11.1 to include new CAP-related alert originators.

- 35. Section 11.11. The Commission amends § 11(a) to delete the reference therein to "analog television broadcast stations" and to include as a minimum requirement compliance with the CAP-related requirements in § 11.56. The Commission observes that the reference to "analog television broadcast stations" is obsolete in light of the fact that since June 13, 2009, all full-power U.S. television stations have broadcast over-the-air signals in digital only. The Commission also finds that incorporating the CAP-related obligations in § 11.56 by reference into section 11.11(a) is necessary to put CAP and SAME on an equal footing in Part 11.
- 36. Section 11.11 equipment deployment tables. The Commission adopts the revisions to the equipment deployment tables in § 11.11 proposed in the Third FNPRM.

  Specifically, the Commission amends the equipment deployment tables in § 11.11 by adding a footnote to the "EAS decoder" entries in the tables to clarify that the obligation to receive and translate CAP-formatted messages may be met by deploying an intermediary device. The Commission finds that because the tables in § 11.11 already require deployment of EAS decoders, a reference to intermediary devices (which are stand-alone equipment in their own right) is required for consistency in light of its decision to permit EAS Participants to deploy intermediary devices to meet their CAP-related obligations. The Commission also deletes the date references in the equipment deployment tables in § 11.11 (as well as cross-references to these dates in other sections of Part 11, such as § 11.51(c) and (d)), along with the entry for two-tone encoders. The Commission finds that this action is required for consistency and has support in the record.
  - 37. The Commission also concludes that incorporating monitoring requirements or

references thereto into § 11.11 is unnecessary. The Commission observes that no party filed comments on this issue directly. The Commission further observes that decoders already are required to meet the monitoring requirements in § 11.52, which it is amending to include CAP monitoring. Accordingly, the Commission concludes that the basic requirement to deploy a decoder (or intermediary device) necessarily triggers CAP monitoring obligations.

- 38. Section 11.20. The Commission concludes that § 11.20 of the Commission's rules need not be revised to accommodate the distribution of CAP messages, as recommended by CSRIC, or to incorporate CAP monitoring, as recommended by parties responding to the Part 11 Public Notice. Specifically, the Commission concludes that the language in § 11.20 is broad enough to encompass EAS messages originated in CAP format, to the extent that a given state relay network is involved in the distribution of that state's CAP-formatted alert messages. The Commission also observes that it does not know what role the state relay network will or will not play in the distribution of CAP messages in each state (or locality), or whether these will be consistent for all states (and localities). The Commission defers specifying how state and local SAME-formatted and CAP-formatted EAS messages are distributed to state and Local Area EAS Plans.
- 39. Section 11.21. The Commission amends the State Area EAS Plan requirements in section 11.21(a) to make clear that the State EAS Plans specify the monitoring assignments and the specific primary and backup path for SAME-formatted EANs and that the monitoring requirements for CAP-formatted EANs are set forth in § 11.52. The Commission observes that it does not know what role, if any, state alerting systems may play in disseminating CAP-formatted EANs in the future. Accordingly, the Commission also includes language that to the extent a state may distribute CAP-formatted EANs to EAS Participants via its state alerting system, its State EAS Plan must include specific and detailed information describing how such messages will be aggregated and delivered, just as it must for state CAP-formatted non-EAN messages.

- 40. The Commission observes that its proposal in the Third FNPRM to clarify § 11.21(a) (and 11.55(a)) that the mandate to process gubernatorial alerts applies to CAP alerts has become moot in light of its decision to eliminate the obligation that EAS Participants receive and process CAP-formatted gubernatorial alerts. The Commission also observes, however, that detailed information describing how state-originated CAP-formatted messages will be aggregated and distributed to EAS Participants, including applicable monitoring requirements, must be detailed in the State EAS Plans, just as the equivalent information for SAME-formatted alerts always has been, and amends § 11.21(a) to make this clear.
- 41. <u>Section 11.21(c)</u>. The Commission defers taking any action regarding the FCC Mapbook, requirements in § 11.21(c) of the Commission's rules, until, at a minimum, it has completed its review of the test data it will be receiving from EAS Participants as a result of the November 9, 2011, Nationwide EAS Test.
- 42. Section 11.31(a)(3). In light of its decisions to require conversion of CAP-formatted messages into the existing EAS Protocol for transmission over the current EAS architecture, the Commission finds that the language in § 11.31(a)(3) limiting the EAS Protocol message to audio, video, or text remains valid and thus declines to revise the language in § 11.31(a) to better reflect CAP's capabilities.
- 43. Section 11.35(a). The Commission amends sections 11.35(a) and (b) to clarify that these sections apply to all equipment used as part of the EAS, including all equipment that performs the functions of decoding and encoding messages formatted in the EAS Protocol and the Common Alerting Protocol. The Commission observes that §§ 11.35(a) and (b) apply to EAS Encoders and Decoders and have terms that are broad enough to capture both integrated CAP-capable EAS devices as well as intermediary devices, but nonetheless clarifies the language in these sections to remove any ambiguity on this issue.
  - 44. <u>Section 11.45</u>. The Commission declines to adopt CSRIC's recommendation to

revise § 11.45 to prohibit CAP messages lacking "Actual" status indicators. The Commission observes that the language in § 11.45 already broadly prohibits the transmission of the EAS codes or attention signal "in any circumstances other than in an actual National, State or Local area emergency." The Commission finds that this language is sufficiently broad to encompass EAS codes and attention signals generated from the receipt of a SAME-formatted or CAP-formatted message. The Commission also observes that the ECIG Implementation Guide, which the Commission adopts as the standard for CAP-to-SAME conversion, already requires that CAP messages have an "ACTUAL" status indicator for EAS activation

- 45. Section 11.51. The Commission adopts the tentative conclusion in the Third

  FNPRM that there is no basis for adopting CSRIC's recommendation to revise the language in section 11.51 of the Commission's rules to state that equipment must be capable of transmitting (or "rendering") a CAP-compliant message to EAS. The Commission observes that to the extent CSRIC meant to revise § 11.51 to ensure conversion of CAP messages into SAME-compliant messages, that requirement has been incorporated into section 11.56. The Commission also observes that this is a fundamental requirement that will be cross-referenced in other sections of Part 11.
- 46. Section 11.51(d), (g)(3), (h)(3), and (j)(2). The Commission amends § 11.51(d), (g)(3), (h)(3), and (j)(2) of the Commission's rules to require EAS Participants to derive the visual display elements, including the originator, event, location and the valid time period of the EAS message, from the CAP text data as described in section 3.6 of the ECIG Implementation Guide. The Commission observes that every commenter addressing this issue favored allowing EAS Participants to construct the video crawl from the enhanced text in CAP per the ECIG Implementation Guide. The Commission further observes that the ECIG Implementation Guide provides procedures for deriving the video crawl translation of a CAP-formatted message to include not only the EAS codes required under the Part 11 rules, but also additional text relating

to the event, which it believes would provide more visual information to alert message viewers. The Commission observes that the utility of such additional text has never been in question. The Commission explains, for example, that the ability to provide additional descriptive information will make alerts more focused, which could be vitally important for Amber alerts and other alerts that require more specific information than the basic who, what, when and where that EAS codes provide. The Commission also observes that CAP alert originators will also be able to include in alerts suggested actions to avoid or prepare for the emergency condition; identify URLs and other sources of additional information; or provide a textual translation of the audio portion of a message, which would be particularly beneficial to the deaf and hard of hearing community.

- 47. The Commission concludes that its concerns expressed in the Third FNPRM regarding the potential for confusion that might arise if stations serving the same geographic area displayed differing video crawls (one based on the SAME elements only and the other based on the enhanced CAP text) are outweighed by the benefit that the enhanced text provides. The Commission observes that such scenarios would arise only when one (or more) of the stations in the geographic area affected by the emergency loses its ability to receive CAP messages but continues to receive over-the-air SAME messages. The Commission also observes that the ECIG Implementation Guide procedure for displaying enhanced CAP text has already been adopted by the industry and FEMA. The Commission also finds that requiring display of enhanced CAP text will provide an incentive for state and local alert message originators to deploy and use CAP-based alert systems and integrate such CAP systems with the EAS and FEMA's IPAWS system.
- 48. The Commission clarifies that it will continue to use the EAS header codes as the baseline requirement for the visual display. The Commission acknowledges that these codes take up some portion of the 1800 characters available for scrolling and that the EAS header codes may not always sufficiently describe the alert. However, the Commission nonetheless finds that some measure of uniformity and consistency in how alert messages are processed over the EAS is

necessary. In this regard, the Commission observes that the ECIG Implementation Guide does not specify minimum descriptive information, and thus if the baseline requirement to include the EAS header codes were eliminated, there is no guarantee that such basic information would be included by the CAP message originator, and descriptive information could vary greatly from state to state and locality to locality. The Commission also finds that ensuring that the EAS header codes are included in CAP messages is critical because stations responsible for regenerating (via the AFSK encoding process) a CAP alert message that has been converted into a SAME-compliant message for the benefit of downstream monitoring stations can only encode the EAS header codes.

- 49. Section 11.54. The Commission declines to adopt CSRIC's recommendations to mandate that CAP-formatted messages be broadcast only if the scope of the alert is "Public," and to revise § 11.54(b)(1) to include IPAWS monitoring. The Commission observes that it is only requiring EAS equipment to produce a SAME-compliant output, and there is no requirement in the EAS Protocol, or more broadly, in the Part 11 rules, to broadcast only "Public" EAS messages. The Commission also observes that the ECIG Implementation Guide, with which the Commission is requiring conformance, already specifies that EAS Participants must ignore CAP-formatted messages with a value in the "scope" field other than "Public." With respect to CSRIC's proposal to revise § 11.54(b)(1) to include IPAWS monitoring, the Commission observes that it is deleting § 11.54(b)(1), and therefore this issue is moot.
- 50. <u>Waivers</u>. The Commission concludes that it would not be appropriate to adopt any form of blanket exemption from the basic obligations of monitoring for, receiving, and processing CAP-formatted messages. The Commission finds that waivers or exemptions from these requirements are best addressed on a case-by-case basis under the waiver standard, where the facts and circumstances of each individual case can be determined on its own merits. The Commission observes, however, that the primary method of distributing CAP messages will be

via a broadband Internet connection and concludes that the physical unavailability of broadband Internet service offers a presumption in favor of a waiver. The Commission clarifies that any waiver based on the physical unavailability of broadband Internet access likely would not exceed six months, with the option of renewal if circumstances have not changed. The Commission also clarifies that questions concerning whether the cost of broadband Internet access in a given geographic area (or other potential substitute CAP alert distribution mechanisms) would constitute grounds for a waiver of the basic CAP-related obligations would be relative to the facts and circumstances of an individual case. The Commission observes that to the extent a waiver applies, the affected party would be required to continue to operate its legacy EAS equipment.

51. The Commission rejects the request of the American Cable Association to exempt cable systems of 500 subscribers or less from the Part 11 rules, concluding that there is no evidence that the costs of meeting the CAP-related obligations would jeopardize any class of entities subject to the Part 11 rules or are otherwise unreasonable. The Commission clarifies that noncommercial educational broadcast satellite stations operating pursuant to a "main studio waiver" need not deploy CAP-capable EAS equipment, provided that the EAS equipment deployed at the parent (hub) station site meets all applicable CAP-related and other requirements set forth in the Fifth Report and Order.

# C. EAS Equipment Certification

- 52. The Commission incorporates conformance with the ECIG Implementation Guide into its existing equipment certification process. The Commission concludes that EAS equipment must be certified as CAP compliant because it is amending Part 11 to require CAP-to-SAME conversion in conformance with the ECIG Implementation Guide, and thus, as part of the required Part 11 functions, it necessarily falls under Part 11's certification requirements.
- 53. In terms of implementation, the Commission finds that the test procedures developed and utilized in FEMA's IPAWS CA program constitute the most logical basis for

demonstrating compliance with the CAP compliance requirements. The Commission further finds that integrated CAP-capable EAS devices that have passed the conformance testing performed under FEMA's IPAWS CA program may use the Supplier's Declaration of Conformity (SDoC) issued under that program to demonstrate CAP-to-SAME conversion in conformance with the ECIG Implementation Guide. The Commission also finds that integrated CAP-capable EAS devices that have not already passed the conformance testing performed under FEMA's IPAWS CA program must independently show conformance with the ECIG Implementation Guide through device testing pursuant to the test procedures developed and utilized in FEMA's IPAWS CA program. The Commission indicates that such testing can be performed by (i) the National Incident Management System (NIMS) Support Center – Supporting Technology Evaluation Project (STEP), which has assumed the role of testing for CAP and IPAWS profile compliance for EAS devices from the IPAWS CA program, or (ii) any other entity. The procedures and time periods for all cases described above are summarized as follows:

For integrated CAP-capable EAS devices that already have FCC certification, the grantee must submit a Class II Permissive Change filing that includes: (i) a cover letter explaining that the purpose of the filing is to apprise the Commission that the device has been tested for compliance with the ECIG Implementation Guide pursuant to the procedures adopted in this order and that the filing is being made to update the device's existing certification file; (ii) a statement signed by the grantee of the device's underlying FCC equipment authorization confirming compliance with section 11.56 of the Commission's rules; and (iii) a copy of either (a) the IPAWS CA program SDoC, if tested under FEMA's program; (b) the NIMS SDoC, if tested under the NIMS CAP testing program; or (c) for devices tested outside these programs, a copy of the test report showing that the device passed the test elements. If the integrated CAP-capable EAS device has already been marketed, the Class II Permissive Change filing must be

- submitted by June 30, 2012, the effective deadline for overall CAP compliance.
- o For integrated CAP-capable EAS devices that do not already have FCC certification, the grantee must include with the FCC certification application materials: (i) a cover letter explaining that the device has been tested for compliance with the ECIG Implementation Guide pursuant to the procedures adopted in this order; (ii) a statement signed by the grantee confirming compliance with section 11.56 of the Commission's rules; and (iii) a copy of either (a) the IPAWS CA program SDoC, if tested under FEMA's IPAWS CA program, (b) the NIMS SDoC, if tested under the NIMS CAP testing program, or (c) for devices tested outside these programs, a copy of the test report showing that the device passed the test elements.
- 54. *Intermediary Devices*. As a preliminary matter, the Commission finds that universal intermediary devices and component intermediary devices perform encoder or decoder functions and as such are subject to certification under § 11.34 of the Commission's rules. Specifically, the Commission observes that universal intermediary devices monitor, acquire, and decode CAP messages, using the relevant CAP data to generate (<u>i.e.</u>, encode) the EAS codes (FSK audio tones) and if present, an audio message, which can be received by the audio input of a legacy EAS device just as it would receive any other over-the-air SAME-formatted message. Accordingly, the Commission finds that universal intermediary devices are subject to certification both as decoders and encoders under § 11.34(a) and (b) of our rules, respectively.
- 55. The Commission observes that component intermediary devices also monitor for, acquire, and decode CAP messages, but because they are configured to interface with a specific legacy EAS device model, they may be capable of communicating the extracted data to the companion legacy EAS device model in a non-AFSK format and thus may not themselves be encoding the SAME data. The Commission concludes that under these circumstances, a component intermediary device would not be subject to certification as an encoder under §

11.34(a) in its capacity as a stand-alone device. The Commission also observes, however, that component intermediary devices are designed for and intended to be operated with specific legacy EAS device models. Accordingly, the Commission finds that the output of the combined system configuration of these devices performs encoding functions which subjects such configuration to certification under § 11.34(a). In addition, the Commission observes that component intermediary devices perform decoding functions in their capacity as stand-alone devices that subject them to certification under § 11.34(b).

56. With respect to incorporating conformance with the ECIG Implementation Guide for intermediary devices into the existing certification process, the Commission observes that FEMA's IPAWS CA program tested intermediary devices for conformance with the ECIG Implementation Guide. Given the nature of the two types of intermediary devices, the Commission concludes that the test procedures developed and utilized in FEMA's IPAWS CA program for testing intermediary devices constitute a sufficient basis for demonstrating compliance with the ECIG Implementation Guide in a way that would impose minimal costs on the affected parties. Accordingly, the Commission concludes that the streamlined certification processes outlined above for integrated CAP-capable EAS devices are equally suitable for intermediary devices. However, with respect to certification testing for ECIG Implementation Guide compliance and Part 11 compliance, the Commission concludes that, because component intermediary devices are designed and intended to be operated with specific legacy EAS device models, certification testing for ECIG Implementation Guide compliance and Part 11 compliance of these devices must be performed on the combined system -i.e., the component intermediary device as configured with the specific legacy EAS device model(s) with which it is marketed and intended to be used. The Commission also clarifies that universal type intermediary devices can be tested as stand-alone devices. The procedures and time periods for all cases described above are summarized as follows:

- O For intermediary devices that already have FCC certification, the grantee must submit a Class II Permissive Change filing that includes: (i) a cover letter explaining that the purpose of the filing is to apprise the Commission that the device has been tested for compliance with the ECIG Implementation Guide pursuant to the procedures adopted in this order and that the filing is being made to update the device's existing certification file; and (ii) a copy of either (a) the IPAWS CA program SDoC, if tested under FEMA's IPAWS CA program; (b) the NIMS SDoC, if tested under the NIMS CAP testing program; or (c) for devices tested outside these programs, a copy of the test report showing that the device passed the test elements. If the intermediary device has already been marketed, the Class II Permissive Change filing must be submitted by June 30, 2012, the effective deadline for overall CAP compliance.
- o For intermediary devices that do not already have FCC certification, the grantee must include with the FCC certification application materials: (i) a cover letter explaining that the device has been tested for compliance with the ECIG Implementation Guide pursuant to the procedures adopted in this order; and (ii) a copy of either (a) the IPAWS CA program SDoC, if tested under FEMA's IPAWS CA program; (b) the NIMS SDoC, if tested under the NIMS CAP testing program; or (c) for devices tested outside these programs, a copy of the test report showing that the device passed the test elements.
- 57. *Modified Equipment*. The Commission concludes that the existing requirements governing modifications to certified equipment in section 2.1043 of the Commission's rules are sufficient to cover CAP-enabled equipment. The Commission clarifies that modifications to authorized EAS equipment that are necessary to implement revisions to the EAS event codes, originator codes, or location codes set forth in section 11.31 may be implemented as Class I permissive changes. The Commission also observes that any future revisions to the CAP-related standards adopted by FEMA could not become effective in the Part 11 rules absent a rulemaking

proceeding.

# E. CAP Messages Originated by State Governors

- formatted messages initiated by state governors is not necessary at this time and is potentially detrimental to effective deployment of CAP-based alerts. Accordingly, the Commission eliminates the mandate from Part 11. In arriving at this determination, the Commission observes that there are a number of practical problems associated with implementing the mandate within the existing EAS system architecture, and overcoming these problems would likely impose significant costs on and disruption to its transitional approach for accommodating CAP within the EAS. The Commission points out as particularly problematic the issue of whether and how the gubernatorial CAP-formatted message could be converted into an EAS Protocol-formatted message for the benefit of downstream monitoring stations. The Commission observes, for example, that the ECIG Implementation Guide procedures for identifying a CAP message as being from a governor only works for an EAS Participant that receives the CAP message, as the CAP-formatted gubernatorial alert cannot be converted and encoded as an existing EAS Protocol-formatted message.
- 59. The Commission also observes that adding a new originator code to make the gubernatorial CAP mandate operational within the legacy EAS domain presents a range of problems. The Commission points out, for example, that such a revision to the EAS Protocol would require updates to every integrated CAP-capable EAS device, intermediary device, and legacy EAS device, the latter of which may not be capable of being updated and would have to be replaced (along with any intermediary device with which they might be configured). The Commission also points out that implementing the mandatory gubernatorial alert within the revised EAS rules would present other equally troubling issues for which there are no ready or obvious technical solutions. The Commission observes that these problems include implementing

priority status within CAP for a gubernatorial alert and mandating broadcast of a category of messages that do not specify an actual emergency. The Commission further observes hat such an open ended mandate might, in some cases, allow the issuance of a mandatory message that may be inappropriate for an alert.

60. The Commission also questions whether the mandatory gubernatorial alert requirement would provide any tangible benefit. The Commission observes that while the mandate was adopted in 2007 as an incentive to encourage and facilitate state use of the EAS network, it does not appear that this rationale applies today. In this regard, the Commission observes that approximately twenty-four states (including one territory) have either deployed CAP systems or are in the planning stages of deploying CAP systems, and given the current economic climate, it seems unlikely that states that have not already deployed or begun plans to deploy CAP systems will do so simply because of an enforceable mandate to carry CAPformatted gubernatorial messages. The Commission further observes that there is near universal voluntary participation by EAS Participants in carrying state and local EAS messages. Accordingly, the Commission concludes that having an enforceable means to guarantee carriage of gubernatorial CAP alert messages seems unnecessary. Finally, the Commission observes that FEMA's IPAWS will provide a means for a State governor, or the governor's authorized representative, to issue targeted CAP-based alerts, not only over the EAS, but over mobile devices.

### F. Revising the Procedures for Processing EANs

61. The Commission amends the Part 11 EAS rules so that EANs will be processed on a message-by-message basis, like any other EAS message, only on a mandatory and priority basis. As part of this rule simplification, the Commission eliminates the Emergency Action Termination (EAT) event code. Under the Commission's revised approach, receipt of an EAN will effectively open an audio channel between the originating source and the EAS Participant's

facilities until the EAS Participant receives an End of Message (EOM) code. After the EAS Participant receives the EOM, the EAS equipment will return to regular programming until receipt of the next EAS message. If that message is another EAN, then the process would repeat; if that message is a state or local EAS message, then that message would be aired in accordance with the specifications in the State or Local Area EAS Plan. The Commission concludes that revising the rules governing EAN processing is necessary because they were designed to accommodate the EAN Network, which was phased out in 1995, and purely manual operation. The Commission also observes that the current EAN processing rules do not translate well for automated operation, are confusing, and in some cases, inconsistent with other Part 11 rules.

- 62. With respect to the question raised in the <u>Third FNPRM</u> regarding whether to eliminate the option for EAS Participants to manually process EANs (but not state or local EAS messages), the Commission finds that it would be premature to take any action on such matter until after it has reviewed the test data from the November 9, 2011, Nationwide EAS Test.

  Accordingly, the Commission defers taking any action on this matter at this time.
- 63. Revising Section 11.54. The Commission deletes §§ 11.54(b)(1), (3), (4), (10), and 11.54(c) from the Part 11 rules. The Commission finds that these provisions are superfluous in the context of the message-by-message processing it is adopting for EANs.
- 64. <u>Deleting Section 11.42</u>. The Commission deletes § 11.42 from the Part 11 rules because it no longer serves any purpose.
- 65. <u>Elminating the EAS Operating Handbook</u>. With respect to the question raised in the <u>Third FNPRM</u> regarding whether to eliminate the EAS Operating Handbook, the Commission finds that it would be premature to take any actions on such matter until after it has reviewed the test data from the November 9, 2011, Nationwide EAS Test. Accordingly, the Commission defers taking any action on this issue at this time.

- 66. However, the Commission is deleting §§ 11.54(a), (b)(2), and (5)-(8) because they serve no purpose under the message-by-message processing approach it adopts for handling EANs. The Commission observes that these provisions all refer to procedures set forth in the EAS Operating Handbook designed to implement the National Emergency Condition, which the Commission is eliminating. The Commission observes that if it elects to retain the EAS Operating Handbook, it will at most serve as an informational document to aid EAS Participant personnel in handling EAS messages manually and will not itself establish any procedures (such as on-air announcements) that must be followed.
- 67. Non-Participating National (NN) Sources. The Commission eliminates NN status on the grounds that it is not necessary. Accordingly, the Commission deletes references to NN status from §§ 11.18, 11.41, 11.54, and 11.55 of the Commission's rules, and deletes § 11.19 altogether. The Commission clarifies that any existing stations operating under NN status must meet the full message-by-message EAN processing requirements, and CAP-related requirements, by the June 30, 2012, general deadline for processing CAP-formatted messages. The Commission finds that elimination of NN status is warranted because it does not appear to serve any purpose today, as NN entities already are required to deploy a decoder that complies with all EAS message processing requirements and follow all of the EAN processing requirements, except broadcasting the audio message. The Commission also observes that there are relatively few NN stations, and that no entity with or without NN status filed comments objecting to the proposal to eliminate NN status raised in the Third FNPRM.
- 68. <u>Deleting Section 11.44</u>. The Commission deletes § 11.44 from the Part 11 rules on grounds that this section is superfluous under the message-by-message approach adopted by the Commission for processing EANs. Although priority for EANs already is provided for in the other sections of Part 11, the Commission also incorporates language on EAN preemption and priority into the definition of the EAN in section 11.2.

- 69. Revising Section 11.53. The Commission deletes § 11.53 from the Part 11 rules as superfluous in light of its decisions to delete almost all of § 11.54 and implement message-by-message processing for EANs. For informational purposes, however, the Commission incorporates the relevant language in § 11.53(a) and (b), describing federal, state, and local origination of the EAN, into the definition of EAN in § 11.2 and clarifies that such origination applies only to EANs formatted and transmitted in accordance with the EAS Protocol requirements in § 11.31.
- 70. Revising Section 11.11(a). The Commission revises section 11.11(a) to remove the references therein to "participating broadcast networks, cable networks and program suppliers; and other entities and industries operating on an organized basis during emergencies at the National, State and local levels" on grounds that these references are a holdover from the Emergency Broadcasting System (EBS) rules and serve no purpose under the message-by-message approach adopted by the Commission for processing EANs.
- 71. <u>Deleting Section 11.16</u>. With respect to the question raised in the <u>Third FNPRM</u> regarding whether to delete § 11.16, the Commission observes that the test data from the November 9, 2011, Nationwide EAS Test, which is under review, may provide insight on this matter. Accordingly, the Commission defers taking any action on this issue at this time.
- 72. However, the Commission is deleting § 11.54(b)(12) and incorporating that section's requirement for Primary Entry Point (PEP) stations to follow the National Control Point Procedures into § 11.16.

#### G. Miscellaneous Part 11 Revisions Not Related to CAP

73. <u>LP-1 Definition</u>. The Commission's assessment of State EAS Plans confirms that there are both radio and TV stations serving as LP-1 stations and it therefore revises the definition for LP-1 stations in section 11.2(b) to reflect that these stations can be a radio or a TV station.

- 74. <u>PEP Definition</u>. The Commission deletes section 11.14, which describes PEP stations, from the Part 11 rules because it mirrors the definition of PEP stations in section 11.2(a) and is therefore superfluous. The Commission also revises section 11.2(a) to delete the numerical reference to the actual number of PEP stations in existence, and clarify that the PEP stations distribute EAS messages in accordance with the EAS Protocol requirements in section 11.31.
- 75. <u>EAN and EAT Definitions</u>. The Commission deletes section 11.13 from the Part 11 rules and folds the definition for the EAN currently in section 11.13 into section 11.2. The Commission observes that the proper location in Part 11 for the EAN definition, currently at section 11.13(a), is the definitions section in section 11.2. Because the Commission also is deleting the EAT, the remaining subsection in section 11.13, section 11.13(b), which describes the EAT, is superfluous, leaving no purpose for retaining section 11.13 in Part 11.
- 76. Geographic Codes. The Commission changes the references to the Federal Information Processing Standard (FIPS) numbers (as described by the U.S. Department of Commerce in National Institute of Standards and Technology publication FIPS PUB 6–4.FIPS number codes) in sections 11.31 and 11.34(d) of the Commission's rules to reflect the American National Standards Institute (ANSI) Codes INCITS 31.200x (Formerly FIPS 6-4), Codes for the Identification of Counties and Equivalent Entities of the United States, its Possessions, and Insular Areas standard that superseded it. The Commission observes that the FIPS standard is outdated and requires revision to keep the Part 11 rules current.
- 77. <u>LPTV and LPFM</u>. The Commission revises the analog and digital broadcast station equipment deployment table in section 11.11(a) of the Commission's rules to correctly identify "LPFM" (Low Power FM) and "LPTV" (Low Power TV) in their respective columns. The Commission also revises sections 11.61(a)(1)(i) and 11.61(a)(2)(ii) to include LPFM stations. The Commission observes that these corrections are necessary to ensure that the rules reflect prior decisions.

- 78. Attention Signal. The Commission concludes that the Attention Signal continues to serve a useful purpose in the EAS framework as an audio notification to the general public that an alert is about to be aired, and therefore will retain the Attention Signal in the Part 11 rules. However, the Commission revises section 11.32(a)(9)(iv) to require that the Attention Signal be set to eight seconds in duration, which reflects what has become common practice and ensures that when the signal is aired, it is done in a consistent manner. In addition, the Commission deletes section 11.33(b), which establishes Attention Signal requirements for decoders, because these requirements were used for demuting and activation functions that do not apply to the EAS. The Commission also deletes section 11.12, which specifies that EBS Attention Signal encoders and decoders can remain in operation until January 1, 1998, because this section is obsolete.
- 79. Section 11.33(a)(9). With respect to the decoder reset requirements specified in section 11.39(a)(9) of the Commission's rules, the Commission finds that EAS Participants should be allowed to relay, for the benefit of downstream monitoring stations, messages they received that did not include an EOM within the reset time limit set on their decoder (presumably, two minutes). More specifically, the Commission finds that when a non-EAN alert exceeds that two minute mark, the EAS Participant's EAS device should be allowed to generate an EOM to make up for the EOM that was not received with the original message. The Commission observes that the record indicates that current EAS equipment already functions in this manner, and that there are many reasons why an EOM might not arrive before the reset value triggers that have nothing to do with the reliability of the message. The Commission further observes that the only way to ensure that an EOM did arrive for a given EAS message prior to the reset value would be to delay relay of that message until the entire message and its EOM has been received, which could take up to two minutes (or more), which it concludes is not in the public interest.
- 80. <u>Section 11.33(a)(3)(ii)</u>. The Commission declines to eliminate the requirement in section 11.33(a)(3)(ii) to delete messages upon expiration of their time periods, as proposed in the

<u>Third FNPRM</u>. The Commission concludes that the valid time period should continue to be set by the message originator, which is the party most responsible for the public's safety. The Commission also observes that EAS Participants have repeatedly stressed that they do not want the responsibility of alert origination, and allowing them to air expired alerts would effectively put them in that role.

- 81. <u>Training</u>. The Commission reiterates that it lacks the authority to raise or distribute funds for EAS-related purposes and therefore cannot provide training for state and local emergency managers. The Commission observes, however, that it can hold workshops and summits as part of its outreach mission. The Commission also observes that it intends to examine the relative merits of making the FCC Mapbook and EAS Operator Handbook more informative and useful for EAS Participants and their personnel.
- EAS Participants to meet the video display requirements in sections 11.51(d), (g)(3), (h)(3), and (j)(2) by using the enhanced text in the CAP message will enable CAP alert message originators to provide a transcript of the audio message, which helps harmonize the EAS rules with the requirements of section 79.2 of the Commission's rules. The Commission also observes that requiring display of enhanced CAP text will provide an incentive for state and local alert message originators to deploy and use CAP-based alert systems. The Commission believes that providing state and local alert message originators with a conduit for the transmission of transcripts of the audio portions of their messages should encourage alert originators to craft messages that will provide accessible alerting for persons with hearing and vision disabilities.
- 83. <u>Proposals Beyond the Scope of the Fifth Report and Order</u>. The Commission identifies several issues raised by comments responding to the <u>Third FNPRM</u> that were not raised in the <u>Third FNPRM</u>. Because these issues were not raised in the <u>Third FNPRM</u>, the Commission does not resolve them in the <u>Fifth Report and Order</u>.

## III. Procedural Matters

## A. Regulatory Flexibility Analysis

84. As required by the Regulatory Flexibility Act of 1980, see 5 U.S.C. § 603, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) of possible significant economic impact on small entities of the policies and rules addressed in this document. The FRFA is set forth in Appendix A.

## B. Paperwork Reduction Act Analysis

- 85. This <u>Fifth Report and Order</u> adopts modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. These modified requirements will be submitted to the Office of Management and Budget (OMB) under an emergency request for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collection requirements contained in this proceeding. In addition, the Commission notes that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), it previously sought specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees.
- 86. In this present document, the Commission has assessed the effects of revisions to current Part 11 reporting, recordkeeping, or compliance requirements as set forth in this <u>Fifth</u>

  Report and Order, and does not expect these revisions to alter the recordkeeping burden of any

  EAS Participants to any appreciable degree. There are no results specific to businesses with fewer than 25 employees.

## C. Congressional Review Act

87. The Commission will send a copy of this <u>Fifth Report and Order</u> to Congress and the Government Accountability Office pursuant to the Congressional Review Act ("CRA"), *see* 5 U.S.C. 801(a)(1)(A).

IV. Ordering Clauses

88. Accordingly, IT IS ORDERED that pursuant to sections 1, 2, 4(i), 4(o), 301,

303(r), 303(v), 307, 309, 335, 403, 624(g), 706, and 715 of the Communications Act of 1934, as

amended, 47 U.S.C. 151, 152, 154(i), 154(o), 301, 303(r), 303(v), 307, 309, 335, 403, 544(g),

606, and 615, this Fifth Report and Order IS ADOPTED.

89. IT IS FURTHER ORDERED that the rules adopted herein WILL BECOME

EFFECTIVE thirty (30) days after the date of their publication in the Federal Register, except for

any reporting, recordkeeping or third-party collection requirements that contain new or modified

information collections. Those rules will become effective on the date specified in a Commission

notice published in the Federal Register announcing their approval under the Paperwork

Reduction Act by the Office of Management and Budget.

90. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental

Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Fifth Report and

Order, including the Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the

Small Business Administration.

List of Subjects in 47 CFR Part 11

Incorporation by reference, Radio, Television.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch

Secretary

For the reasons discussed in the preamble, the Federal Communications Commission

amends 47 CFR Part 11 as follows:

PART 11 – EMERGENCY ALERT SYSTEM (EAS)

1. The authority citation for part 11 continues to read as follows:

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Authority: 47 U.S.C. 151, 154 (i) and (o), 303(r), 544(g) and 606.

2. Revise § 11.2 to read as follows:

#### § 11.2 Definitions.

The definitions of terms used in part 11 are:

- (a) Emergency Action Notification (EAN). The Emergency Action Notification is the notice to all EAS Participants and to the general public that the EAS has been activated for a national emergency. EAN messages that are formatted in the EAS Protocol (specified in §11.31) are sent from a government origination point to broadcast stations and other entities participating in the PEP system, and are subsequently disseminated via EAS Participants. Dissemination arrangements for EAN messages that are formatted in the EAS Protocol (specified in §11.31) at the State and local levels are specified in the State and Local Area plans (defined at §11.21). A national activation of the EAS for a Presidential message with the Event code EAN as specified in §11.31 must take priority over any other message and preempt it if it is in progress.
- (b) Primary Entry Point (PEP) System. The PEP system is a nationwide network of broadcast stations and other entities connected with government activation points. It is used to distribute EAS messages that are formatted in the EAS Protocol (specified in §11.31), including the EAN and EAS national test messages. FEMA has designated some of the nation's largest radio broadcast stations as PEPs. The PEPs are designated to receive the Presidential alert from FEMA and distribute it to local stations.

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- (c) <u>Local Primary One (LP-1)</u>. The LP-1 is a radio or TV station that acts as a key EAS monitoring source. Each LP-1 station must monitor its regional PEP station and a back-up source for Presidential messages.
- (d) <u>EAS Participants</u>. Entities required under the Commission's rules to comply with EAS rules, e.g., analog radio and television stations, and wired and wireless cable television systems, DBS, DTV, SDARS, digital cable and DAB, and wireline video systems.
- (e) <u>Wireline Video System</u>. The system of a wireline common carrier used to provide video programming service.
- (f) <u>Participating National (PN)</u>. PN stations are broadcast stations that transmit EAS National, state, or local EAS messages to the public.
- (g) <u>National Primary (NP)</u>. Stations that are the primary entry point for Presidential messages delivered by FEMA. These stations are responsible for broadcasting a Presidential alert to the public and to State Primary stations within their broadcast range.
- (h) <u>State Primary (SP)</u>. Stations that are the entry point for State messages, which can originate from the Governor or a designated representative.
- (i) <u>Intermediary Device</u>. An intermediary device is a stand-alone device that carries out the functions of monitoring for, receiving and/or acquiring, and decoding EAS messages

formatted in the Common Alerting Protocol (CAP) in accordance with §11.56, and converting such messages into a format that can be inputted into a separate EAS decoder, EAS encoder, or unit combining such decoder and encoder functions, so that the EAS message outputted by such separate EAS decoder, EAS encoder, or unit combining such decoder and encoder functions, and all other functions attendant to processing such EAS message, comply with the requirements in this part.

3. Amend § 11.11 by revising paragraphs (a) and (d) to read as follows:

# § 11.11 The Emergency Alert System (EAS).

(a) The EAS is composed of analog radio broadcast stations including AM, FM, and Low-power FM (LPFM) stations; digital audio broadcasting (DAB) stations, including digital AM, FM, and Low-power FM stations; Class A television (CA) and Low-power TV (LPTV) stations; digital television (DTV) broadcast stations, including digital CA and digital LPTV stations; analog cable systems; digital cable systems which are defined for purposes of this part only as the portion of a cable system that delivers channels in digital format to subscribers at the input of a Unidirectional Digital Cable Product or other navigation device; wireline video systems; wireless cable systems which may consist of Broadband Radio Service (BRS), or Educational Broadband Service (EBS) stations; DBS services, as defined in §25.701(a) of this chapter (including certain Kuband Fixed-Satellite Service Direct to Home providers); and SDARS, as defined in §25.201 of this chapter. These entities are referred to collectively as EAS Participants in this part, and are subject to this part, except as otherwise provided herein. At a minimum EAS Participants must use a common EAS protocol, as defined in §11.31, to send and

receive emergency alerts, and comply with the requirements set forth in §11.56, in accordance with the following tables:

Table 1: Analog and Digital Broadcast Station Equipment Deployment Requirements

EAS equipment requirement	AM & FM	Digital AM & FM	Analog & Digital FM Class D	Analog & Digital LPFM	DTV	Analog & Digital Class A TV	Analog & Digital LPTV
EAS decoder <sup>1</sup>	Υ	Y	Y	Υ	Υ	Υ	Υ
EAS encoder	Υ	Υ	N	N	Υ	Υ	N
Audio message	Υ	Υ	Υ	Υ	Υ	Υ	Y
Video message	N/A	N/A	N/A	N/A	Y	Υ	Y

 $<sup>^{1} \ \ \</sup>text{EAS Participants may comply with the obligations set forth in §11.56 to decode and convert CAP-formatted messages into EAS Protocol-compliant messages by deploying an Intermediary Device, as specified in §11.56(b).}$ 

# **Analog Cable Systems**

Analog cable systems are subject to the requirements in Table 2 below. Analog cable systems serving fewer than 5,000 subscribers from a headend may either provide the National level EAS message on all programmed channels including the required testing, or comply with the requirements in Table 2.

**Table 2: Analog Cable System Equipment Deployment Requirements** 

EAS equipment requirement	≥5,000 subscribers	<5,000 subscribers
EAS decoder <sup>1</sup>	Υ	Υ
EAS encoder	Υ	$Y^2$
Audio and Video EAS Message on all channels	Υ	N
Video interrupt and audio alert message on all channels; <sup>3</sup> Audio and Video EAS message on at least one channel	N	Υ

# Wireless Cable Systems (BRS/EBS Stations)

Wireless cable systems are subject to the requirements in Table 3 below. Wireless cable systems serving fewer than 5,000 subscribers from a single transmission site must either provide the National level EAS message on all programmed channels including the required testing, or comply with the requirements in Table 3.

**Table 3: Wireless Cable System Equipment Deployment Requirements** 

EAS equipment requirement	≥5,000 subscribers	<5,000 subscribers
EAS decoder <sup>1</sup>	Υ	Υ
EAS encoder	Υ	$Y^2$
Audio and Video EAS Message on all channels <sup>3</sup>	Υ	N
Video interrupt and audio alert message on all channels; <sup>4</sup> Audio and Video EAS message on at least one channel	N	Υ

<sup>&</sup>lt;sup>1</sup> EAS Participants may comply with the obligations set forth in §11.56 to decode and convert CAP-formatted messages into EAS Protocol-compliant messages by deploying an Intermediary Device, as specified in §11.56(b).

# Digital Cable Systems and Wireline Video Systems

<sup>&</sup>lt;sup>1</sup> EAS Participants may comply with the obligations set forth in §11.56 to decode and convert CAP-formatted messages into EAS Protocol-compliant messages by deploying an Intermediary Device, as specified in §11.56(b).

Analog cable systems serving <5,000 subscribers are permitted to operate without an EAS encoder if they install an FCC-certified decoder.

<sup>&</sup>lt;sup>3</sup> The Video interrupt must cause all channels that carry programming to flash for the duration of the EAS emergency message. The audio alert must give the channel where the EAS messages are carried and be repeated for the duration of the EAS message. [ Note: Programmed channels do not include channels used for the transmission of data such as interactive games.]

Wireless cable systems serving <5,000 subscribers are permitted to operate without an EAS encoder if they install an FCC-certified decoder.

<sup>&</sup>lt;sup>3</sup> All wireless cable systems may comply with this requirement by providing a means to switch all programmed channels to a predesignated channel that carries the required audio and video EAS messages.

<sup>&</sup>lt;sup>4</sup> The Video interrupt must cause all channels that carry programming to flash for the duration of the EAS emergency message. The audio alert must give the channel where the EAS messages are carried and be repeated for the duration of the EAS message. [Note: Programmed channels do not include channels used for the transmission of data services such as Internet.]

Digital cable systems and Wireline Video Systems must comply with the requirements in Table 4 below. Digital cable systems and Wireline Video Systems serving fewer than 5,000 subscribers from a headend must either provide the National level EAS message on all programmed channels including the required testing, or comply with the requirements in Table 4.

Table 4: Digital Cable System and Wireline Video System Equipment Deployment Requirements

EAS equipment requirement	≥5,000 subscribers	<5,000 subscribers
EAS decoder <sup>1</sup>	Υ	Υ
EAS encoder	Υ	$Y^2$
Audio and Video EAS Message on all channels <sup>3</sup>	Υ	N
Video interrupt and audio alert message on all channels; <sup>4</sup> Audio and Video EAS message on at least one channel	N	Υ

<sup>&</sup>lt;sup>1</sup> EAS Participants may comply with the obligations set forth in §11.56 to decode and convert CAP-formatted messages into EAS Protocol-compliant messages by deploying an Intermediary Device, as specified in §11.56(b).

#### SDARS and DBS

EAS equipment requirement	SDARS	DBS
EAS decoder <sup>1</sup>	Υ	Υ
EAS encoder	Υ	Υ
Audio message on all channels <sup>2</sup>	Υ	Υ
Video message on all channels <sup>2</sup>	N/A	Υ

<sup>&</sup>lt;sup>2</sup> Digital cable systems and wireline video systems serving <5,000 subscribers are permitted to operate without an EAS encoder if they install an FCC-certified decoder.

<sup>&</sup>lt;sup>3</sup> All digital cable systems and wireline video systems may comply with this requirement by providing a means to switch all programmed channels to a predesignated channel that carries the required audio and video EAS messages.

<sup>&</sup>lt;sup>4</sup> The Video interrupt must cause all channels that carry programming to flash for the duration of the EAS emergency message. The audio alert must give the channel where the EAS messages are carried and be repeated for the duration of the EAS message. [Note: Programmed channels do not include channels used for the transmission of data services such as Internet access.]

\* \* \* \* \*

(d) Local franchise authorities may use any EAS codes authorized by the FCC in any agreements.

\* \* \* \* \*

# § 11.12 [Removed and Reserved]

4. Remove and reserve § 11.12.

## § 11.13 [Removed and Reserved]

5. Remove and reserve § 11.13.

## § 11.14 [Removed and Reserved]

6. Remove and reserve § 11.14.

## § 11.18 [Amended]

7. Amend § 11.18 by removing paragraph (f).

# § 11.19 [Removed]

- 8. Remove § 11.19.
- 9. Amend § 11.21 by revising paragraph (a) to read as follows:

#### § 11.21 State and Local Area plans and FCC Mapbook.

\* \* \* \* \*

(a) The State EAS Plan contains procedures for State emergency management and other State officials, the NWS, and EAS Participants' personnel to transmit emergency

 $<sup>^{1}</sup>$  EAS Participants may comply with the obligations set forth in §11.56 to decode and convert CAP-formatted messages into EAS Protocol-compliant messages by deploying an Intermediary Device, as specified in §11.56(b).

<sup>&</sup>lt;sup>2</sup> All SDARS and DBS providers may comply with this requirement by providing a means to switch all programmed channels to a predesignated channel that carries the required audio and video EAS messages or by any other method that ensures that viewers of all channels receive the EAS message.

information to the public during a State emergency using the EAS. State EAS Plans should include a data table, in computer readable form, clearly showing monitoring assignments and the specific primary and backup path for emergency action notification (EAN) messages that are formatted in the EAS Protocol (specified in §11.31), from the PEP to each station in the plan. If a state's emergency alert system is capable of initiating EAS messages formatted in the Common Alerting Protocol (CAP), its State EAS Plan must include specific and detailed information describing how such messages will be aggregated and distributed to EAS Participants within the state, including the monitoring requirements associated with distributing such messages.

\* \* \* \* \*

10. Amend § 11.31 by revising paragraphs (c), (e) and (f) to read as follows:

#### § 11.31 EAS protocol.

\* \* \* \* \*

(c) The EAS protocol, including any codes, must not be amended, extended or abridged without FCC authorization. The EAS protocol and message format are specified in the following representation.

Examples are provided in FCC Public Notices.

[PREAMBLE]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-(one second pause)

[PREAMBLE]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-(one second pause)

[PREAMBLE]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-(at least a one second pause)

(transmission of 8 to 25 seconds of Attention Signal)

(transmission of audio, video or text messages)

(at least a one second pause)

[PREAMBLE]NNNN (one second pause)

[PREAMBLE]NNNN (one second pause)

[PREAMBLE]NNNN (at least one second pause)

[PREAMBLE] This is a consecutive string of bits (sixteen bytes of AB hexadecimal [8 bit byte 10101011]) sent to clear the system, set AGC and set asynchronous decoder clocking cycles. The preamble must be transmitted before each header and End of Message code.

ZCZC--This is the identifier, sent as ASCII characters ZCZC to indicate the start of ASCII code.

ORG--This is the Originator code and indicates who originally initiated the activation of the EAS. These codes are specified in paragraph (d) of this section.

EEE--This is the Event code and indicates the nature of the EAS activation. The codes are specified in paragraph (e) of this section. The Event codes must be compatible with the codes used by the NWS Weather Radio Specific Area Message Encoder (WRSAME).

PSSCCC--This is the Location code and indicates the geographic area affected by the EAS alert. There may be 31 Location codes in an EAS alert. The Location code uses the codes described in the American National Standards Institute (ANSI) standard, ANSI INCITS 31-2009 ("Information technology - Codes for the Identification of Counties and Equivalent Areas of the United States, Puerto Rico, and the Insular Areas"). Each state is

assigned an SS number as specified in paragraph (f) of this section. Each county and some cities are assigned a CCC number. A CCC number of 000 refers to an entire State or Territory. P defines county subdivisions as follows: 0 = all or an unspecified portion of a county, 1 = Northwest, 2 = North, 3 = Northeast, 4 = West, 5 = Central, 6 = East, 7 = Southwest, 8 = South, 9 = Southeast. Other numbers may be designated later for special applications. The use of county subdivisions will probably be rare and generally for oddly shaped or unusually large counties. Any subdivisions must be defined and agreed to by the local officials prior to use.

+TTTT--This indicates the valid time period of a message in 15 minute segments up to one hour and then in 30 minute segments beyond one hour; i.e., +0015, +0030, +0045, +0100, +0430 and +0600.

JJJHHMM--This is the day in Julian Calendar days (JJJ) of the year and the time in hours and minutes (HHMM) when the message was initially released by the originator using 24 hour Universal Coordinated Time (UTC).

LLLLLLL-This is the identification of the EAS Participant, NWS office, etc., transmitting or retransmitting the message. These codes will be automatically affixed to all outgoing messages by the EAS encoder.

NNNN--This is the End of Message (EOM) code sent as a string of four ASCII N characters.

\* \* \* \* \*

# (e) The following Event (EEE) codes are presently authorized:

Nature of Activation	Event Codes
National Codes (Required):	
Emergency Action Notification (National only)	EAN
National Information Center	NIC
National Periodic Test	NPT
Required Monthly Test	RMT
Required Weekly Test	RWT
State and Local Codes (Optional):	
Administrative Message	ADR
Avalanche Warning	AVW <sup>1</sup>
Avalanche Watch	AVA <sup>1</sup>
Blizzard Warning	BZW
Child Abduction Emergency	CAE <sup>1</sup>
Civil Danger Warning	CDW <sup>1</sup>
Civil Emergency Message	CEM
Coastal Flood Warning	CFW <sub>1</sub> <sup>1</sup>
Coastal Flood Watch	CFA <sup>1</sup>
Dust Storm Warning	DSW <sup>1</sup>
Earthquake Warning	EQW <sup>1</sup>
Evacuation Immediate	EVI
Fire Warning	FRW <sup>1</sup>
Flash Flood Warning	FFW
Flash Flood Watch	FFA
Flash Flood Statement	FFS
Flood Warning	FLW
Flood Watch Flood Statement	FLA
Hazardous Materials Warning	FLS HMW <sup>1</sup>
High Wind Warning	HWW
High Wind Watch	HWA
Hurricane Warning	HUW
Hurricane Watch	HUA
Hurricane Statement	HLS
Law Enforcement Warning	LEW <sup>1</sup>
Local Area Emergency	LAE <sup>1</sup>
Network Message Notification	NMN <sup>1</sup>
911 Telephone Outage Emergency	TOE <sup>1</sup>
Nuclear Power Plant Warning	NUW <sup>1</sup>
Practice/Demo Warning	DMO
Radiological Hazard Warning	RHW <sup>1</sup>
Severe Thunderstorm Warning	SVR
Severe Thunderstorm Watch	SVA
Severe Weather Statement	SVS
Shelter in Place Warning	SPW <sup>1</sup>
Special Marine Warning	SMW <sup>1</sup>
Special Weather Statement	SPS
Tornado Warning	TOR
Tornado Watch	TOA
Tropical Storm Warning	TRW <sup>1</sup>
Tropical Storm Watch	TRA <sup>1</sup>
Tsunami Warning	TSW
Tsunami Watch	TSA <sub>.</sub>
Volcano Warning	VOW <sup>1</sup>
Winter Storm Warning	WSW

Winter Storm Watch WSA

(f) The State, Territory and Offshore (Marine Area) ANSI number codes (SS) are as follows. County ANSI numbers (CCC) are contained in the State EAS Mapbook.

	ANSI#
State:	
AL	01
AK	02
AZ	04
AR	05
CA	06
CO	08
CT	09
DE	10
DC	11
FL	12
GA	13
HI	15
ID	16
IL	17
IN	18
IA	19
KS	20
KY	21
LA	22
ME	23
MD	24
MA	25
MI	26
MN	27
MS	28
MO	29
MT	30
NE	31
NV	32
NH	33
NJ	34
NM	35
NY	36
NC	37
ND	38
OH	39
OK	40
OR	41
PA	42
RI	44

<sup>&</sup>lt;sup>1</sup> Effective May 16, 2002, analog radio and television broadcast stations, analog cable systems and wireless cable systems may upgrade their existing EAS equipment to add these event codes on a voluntary basis until the equipment is replaced. All models of EAS equipment manufactured after August 1, 2003 must be capable of receiving and transmitting these event codes. EAS Participants that install or replace their EAS equipment after February 1, 2004 must install equipment that is capable of receiving and transmitting these event codes.

SC	45
SD	46
TN	47
TX	48
UT	49
VT	50
VA	51
WA	53
WV	54
WI	55
WY	56
Terr.:	
AS	60
FM	64
GU	66
MH	68
MH	68
PR	72
PW	70
UM	74
25	78
Offshore (Marine Areas) <sup>1</sup> :	
Eastern North Pacific Ocean, and	
along U.S. West Coast from	
Canadian border to Mexican border	57
North Pacific Ocean near Alaska, and along Alaska coastline, including	
the Bering Sea and the Gulf of	
Alaska	58
Central Pacific Ocean, including	
Hawaiian waters	59
South Central Pacific Ocean,	64
including American Samoa waters Western Pacific Ocean, including	61
Mariana Island waters	65
Western North Atlantic Ocean, and	
along U.S. East Coast, from	
Canadian border south to Currituck	
Beach Light, N.C	73
Western North Atlantic Ocean, and along U.S. East Coast, south of	
Currituck Beach Light, N.C.,	
following the coastline into Gulf of	
Mexico to Bonita Beach, FL.,	
including the Caribbean	75
Gulf of Mexico, and along the U.S.	
Gulf Coast from the Mexican border	77
to Bonita Beach, FL Lake Superior	77
Lake Michigan	91
Lake Huron	92
Lake St. Clair	93
Lake St. Claii Lake Erie	94
Lake Ontario	96 97
St. Lawrence River above St. Regis	98
- C. Lawrence Mive above Or Megis	90

<sup>&</sup>lt;sup>1</sup> Effective May 16, 2002, analog radio and television broadcast stations, analog cable systems and wireless cable systems may upgrade their existing EAS equipment to add these marine area location codes on a voluntary basis until the

equipment is replaced. All models of EAS equipment manufactured after August 1, 2003, must be capable of receiving and transmitting these marine area location codes. EAS Participants that install or replace their EAS equipment after February 1, 2004, must install equipment that is capable of receiving and transmitting these location codes.

11. Amend § 11.32 by revising paragraphs (a)(2), (a)(3) and (a)(9)(iv) to read as follows:

## § 11.32 EAS Encoder.

- (a) \* \* \*
- (2) <u>Inputs</u>. The encoder shall have at least one input port used for audio messages and at least one input port used for data messages.
- (3) <u>Outputs</u>. The encoder shall have at least one audio output port and at least one data output port.
- \* \* \* \* \*
- (9) \* \* \*
- (iv) <u>Time Period for Transmission of Tones</u>. The encoder shall have timing circuitry that automatically generates the two tones simultaneously for a time period of 8 seconds.
- \* \* \* \* \*
- 12. Amend § 11.33 by:
  - a. Revising paragraphs (a) introductory text, (a)(1), (a)(4), (a)(7), and (a)(11); and
  - b. Removing paragraph (b) and re-designating paragraph (c) as paragraph (b).

The revisions read as follows:

#### § 11.33 EAS Decoder.

(a) An EAS Decoder must at a minimum be capable of providing the EAS monitoring functions described in §11.52, decoding EAS messages formatted in accordance with the EAS Protocol described in §11.31, and converting Common Alerting Protocol (CAP)-

formatted EAS messages into EAS alert messages that comply with the EAS Protocol, in accordance with §11.56(a)(2), with the exception that the CAP-related monitoring and conversion requirements set forth in §§11.52(d)(2) and 11.56(a)(2) can be satisfied via an Intermediary Device, as specified in §11.56(b), provided that all other requirements set forth in this part are met. An EAS Decoder also must be capable of the following minimum specifications:

(1) <u>Inputs</u>. Decoders must have the capability to receive at least two audio inputs from EAS monitoring assignments, and at least one data input. The data input(s) may be used to monitor other communications modes such as Radio Broadcast Data System (RBDS), NWR, satellite, public switched telephone network, or any other source that uses the EAS protocol.

\* \* \* \* \*

(4) <u>Display and logging</u>. For received alert messages formatted in both the EAS Protocol and Common Alerting Protocol, a visual message shall be developed from any valid header codes for tests and national activations and any preselected header codes received. The message shall at a minimum include the Originator, Event, Location, the valid time period of the message and the local time the message was transmitted. The message shall be in the primary language of the EAS Participant and be fully displayed on the decoder and readable in normal light and darkness. The visual message developed from received alert messages formatted in the Common Alerting Protocol must conform to the requirements in §§11.51(d), (g)(3), (h)(3), and (j)(2) of this part. All existing and new models of EAS decoders manufactured after August 1, 2003 must provide a means to

permit the selective display and logging of EAS messages containing header codes for state and local EAS events. Effective May 16, 2002, analog radio and television broadcast stations, analog cable systems and wireless cable systems may upgrade their decoders on an optional basis to include a selective display and logging capability for EAS messages containing header codes for state and local events. EAS Participants that install or replace their decoders after February 1, 2004 must install decoders that provide a means to permit the selective display and logging of EAS messages containing header codes for state and local EAS events.

\* \* \* \* \*

(7) <u>Outputs</u>. Decoders shall have at least one data port where received valid EAS header codes and received preselected header codes are available, at least one audio port that is capable of monitoring each decoder audio input, and an internal speaker to enable personnel to hear audio from each input.

\* \* \* \* \*

(11) A header code with the EAN Event code specified in §11.31(c) that is received through any of the audio or data inputs must override all other messages.

\* \* \* \* \*

13. Amend § 11.34 by revising paragraph (d) to read as follows:

# § 11.34 Acceptability of the equipment.

\* \* \* \* \*

(d) Manufacturers must include instructions and information on how to install, operate and program an EAS Encoder, EAS Decoder, or combined unit and a list of all State and county ANSI numbers with each unit sold or marketed in the U.S.

\* \* \* \* \*

14. Amend § 11.35 by revising paragraphs (a) and (b) to read as follows:

#### § 11.35 Participation in EAS.

(a) EAS Participants are responsible for ensuring that EAS Encoders, EAS Decoders, Attention Signal generating and receiving equipment, and Intermediate Devices used as part of the EAS to decode and/or encode messages formatted in the EAS Protocol and/or the Common Alerting Protocol are installed so that the monitoring and transmitting functions are available during the times the stations and systems are in operation.

Additionally, EAS Participants must determine the cause of any failure to receive the required tests or activations specified in §11.61(a)(1) and (2). Appropriate entries indicating reasons why any tests were not received must be made in the broadcast station log as specified in §§73.1820 and 73.1840 of this chapter for all broadcast streams and cable system records as specified in §§76.1700, 76.1708, and 76.1711 of this chapter. All other EAS Participants must also keep records indicating reasons why any tests were not received and these records must be retained for two years, maintained at the EAS Participant's headquarters, and made available for public inspection upon reasonable request.

(b) If an EAS Encoder, EAS Decoder or Intermediary Device used as part of the EAS to decode and/or encode messages formatted in the EAS Protocol and/or the Common Alerting Protocol becomes defective, the EAS Participant may operate without the defective equipment pending its repair or replacement for 60 days without further FCC authority. Entries shall be made in the broadcast station log, cable system records, and records of other EAS Participants, as specified in paragraph (a) of this section, showing the date and time the equipment was removed and restored to service. For personnel training purposes, the required monthly test script must still be transmitted even though the equipment for generating the EAS message codes, Attention Signal and EOM code is not functioning.

\* \* \* \* \*

15. Revise § 11.41 to read as follows:

#### § 11.41 Participation in EAS.

All EAS Participants specified in §11.11 are categorized as Participating National (PN) sources, and must have immediate access to an EAS Operating Handbook.

#### § 11.42 [Removed and Reserved]

16. Remove and reserve § 11.42.

## § 11.44 [Removed and Reserved]

17. Remove and reserve § 11.44.

18. Amend § 11.51 by revising paragraphs (a), (c), (d), (g)(3), (h)(3), (i) introductory text, (j) introductory text, (j)(2), paragraph (m) introductory text, and adding paragraph (p) to read as follows:

# § 11.51 EAS code and Attention Signal Transmission requirements.

- (a) Analog and digital broadcast stations must transmit, either automatically or manually, national level EAS messages and required tests by sending the EAS header codes,

  Attention Signal, emergency message and End of Message (EOM) codes using the EAS

  Protocol. The Attention Signal must precede any emergency audio message.
- \* \* \* \* \*
- (c) All analog and digital radio and television stations shall transmit EAS messages in the main audio channel. All DAB stations shall also transmit EAS messages on all audio streams. All DTV broadcast stations shall also transmit EAS messages on all program streams.
- (d) Analog and digital television broadcast stations shall transmit a visual message containing the Originator, Event, Location and the valid time period of an EAS message. Effective June 30, 2012, visual messages derived from CAP-formatted EAS messages shall contain the Originator, Event, Location and the valid time period of the message and shall be constructed in accordance with §3.6 of the "ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0" (May 17, 2010), except that if the EAS Participant has deployed an Intermediary Device to meet its CAP-related obligations, this requirement shall be effective June 30, 2015, and until such date shall be subject to the general requirement to transmit a visual message containing the Originator, Event, Location and the valid time period of the EAS message. If the message is a video crawl,

it shall be displayed at the top of the television screen or where it will not interfere with other visual messages.

\* \* \* \* \*

- (g) \* \* \*
- (3) Shall transmit a visual EAS message on at least one channel. The visual message shall contain the Originator, Event, Location, and the valid time period of the EAS messages. Effective June 30, 2012, visual messages derived from CAP-formatted EAS messages shall contain the Originator, Event, Location and the valid time period of the message and shall be constructed in accordance with §3.6 of the "ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0" (May 17, 2010), except that if the EAS Participant has deployed an Intermediary Device to meet its CAP-related obligations, this requirement shall be effective June 30, 2015, and until such date shall be subject to the general requirement to transmit a visual message containing the Originator, Event, Location and the valid time period of the EAS message. If the visual message is a video crawl, it shall be displayed at the top of the subscriber's television screen or where it will not interfere with other visual messages.

\* \* \* \* \*

- (h) \* \* \*
- (3) Shall transmit the EAS visual message on all downstream channels. The visual message shall contain the Originator, Event, Location, and the valid time period of the EAS message. Effective June 30, 2012, visual messages derived from CAP-formatted EAS messages shall contain the Originator, Event, Location and the valid time period of the message and shall be constructed in accordance with §3.6 of the "ECIG"

Recommendations for a CAP EAS Implementation Guide, Version 1.0" (May 17, 2010), except that if the EAS Participant has deployed an Intermediary Device to meet its CAP-related obligations, this requirement shall be effective June 30, 2015, and until such date shall be subject to the general requirement to transmit a visual message containing the Originator, Event, Location and the valid time period of the EAS message. If the visual message is a video crawl, it shall be displayed at the top of the subscriber's television screen or where it will not interfere with other visual messages.

\* \* \* \* \*

(i) SDARS licensees shall transmit national audio EAS messages on all channels in the same order specified in paragraph (a) of this section.

\* \* \* \* \*

(j) DBS providers shall transmit national audio and visual EAS messages on all channels in the same order specified in paragraph (a) of this section.

\* \* \* \* \*

(2) The visual message shall contain the Originator, Event, Location, and the valid time period of the EAS message. Effective June 30, 2012, visual messages derived from CAP-formatted EAS messages shall contain the Originator, Event, Location and the valid time period of the message and shall be constructed in accordance with §3.6 of the "ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0" (May 17, 2010), except that if the EAS Participant has deployed an Intermediary Device to meet its CAP-related obligations, this requirement shall be effective June 30, 2015, and until such date shall be subject to the general requirement to transmit a visual message containing the Originator, Event, Location and the valid time period of the EAS message. If the visual

message is a video crawl, it shall be displayed at the top of the subscriber's television screen or where it will not interfere with other visual messages.

\* \* \* \* \*

(m) EAS Participants are required to transmit all received EAS messages in which the header code contains the Event codes for Emergency Action Notification (EAN) and Required Monthly Test (RMT), and when the accompanying location codes include their State or State/county. These EAS messages shall be retransmitted unchanged except for the LLLLLLL-code which identifies the EAS Participant retransmitting the message. See §11.31(c). If an EAS source originates an EAS message with the Event codes in this paragraph, it must include the location codes for the State and counties in its service area. When transmitting the required weekly test, EAS Participants shall use the event code RWT. The location codes are the state and county for the broadcast station city of license or system community or city. Other location codes may be included upon approval of station or system management. EAS messages may be transmitted automatically or manually.

\* \* \* \* \*

(p) The standard required in this section is incorporated by reference into this section with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Federal Communications Commission must publish notice of change in the Federal Register and the material must be available to the public. All approved material is available for inspection at the Federal Communications Commission, 445 12th Street, SW., Washington, DC (Reference Information Center) and is available from the source

indicated below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to

http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

- (1) The following standard is available from the EAS-CAP Industry Group (ECIG), 21010 Southbank Street, #365, Sterling, VA, 20165, go to http://www.eas-cap.org.
- (i) "ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0" (May 17, 2010).
- (ii) [Reserved].
- 19. Amend § 11.52 by revising paragraphs (a) introductory text, (d), (e) introductory text and (e)(2) to read as follows:

#### § 11.52 EAS code and Attention Signal Monitoring requirements.

- (a) EAS Participants must be capable of receiving the Attention Signal required by \$11.31(a)(2) and emergency messages of other broadcast stations during their hours of operation. EAS Participants must install and operate during their hours of operation, equipment that is capable of receiving and decoding, either automatically or manually, the EAS header codes, emergency messages and EOM code, and which complies with the requirements in \$11.56.
- \* \* \* \* \*
- (d) EAS Participants must comply with the following monitoring requirements:
- (1) With respect to monitoring for EAS messages that are formatted in accordance with the EAS Protocol, EAS Participants must monitor two EAS sources. The monitoring

assignments of each broadcast station and cable system and wireless cable system are specified in the State EAS Plan and FCC Mapbook. They are developed in accordance with FCC monitoring priorities.

- (2) With respect to monitoring EAS messages formatted in accordance with the specifications set forth in §11.56(a)(2), EAS Participants' EAS equipment must interface with the Federal Emergency Management Agency's Integrated Public Alert and Warning System (IPAWS) to enable (whether through "pull" interface technologies, such as Really Simple Syndication (RSS) and Atom Syndication Format (ATOM), or "push" interface technologies, such as instant messaging and e-mail) the distribution of Common Alert Protocol (CAP)-formatted alert messages from the IPAWS system to EAS Participants' EAS equipment.
- (3) Monitoring specifications associated with the distribution of CAP-formatted alert messages by state alert message systems are described in the State EAS Plan, as set forth in §11.21(a).
- (4) If the required EAS message sources cannot be received, alternate arrangements or a waiver may be obtained by written request to the Chief, Public Safety and Homeland Security Bureau. In an emergency, a waiver may be issued over the telephone with a follow up letter to confirm temporary or permanent reassignment.
- (5) The management of EAS Participants shall determine which header codes will automatically interrupt their programming for State and Local Area emergency situations affecting their audiences.
- (e) EAS Participants are required to interrupt normal programming either automatically or manually when they receive an EAS message in which the header code contains the

Event codes for Emergency Action Notification (EAN) or the Required Monthly Test (RMT) for their State or State/county location.

\* \* \* \* \*

(2) Manual interrupt of programming and transmission of EAS messages may be used.

EAS messages with the EAN Event code must be transmitted immediately and Monthly

EAS test messages within 60 minutes. All actions must be logged and recorded as

specified in §§11.35(a) and 11.54(a)(3). Decoders must be programmed for the EAN

Event header code and the RMT and RWT Event header codes (for required monthly and weekly tests), with the appropriate accompanying State and State/county location codes.

## § 11.53 [Removed and Reserved]

- 20. Remove and reserve § 11.53.
- 21. Revise § 11.54 to read as follows:

# § 11.54 EAS operation during a National Level emergency.

- (a) Immediately upon receipt of an EAN message, EAS Participants must comply with the following requirements, as applicable:
- (1) Analog and digital broadcast stations may transmit their call letters and analog cable systems, digital cable systems and wireless cable systems may transmit the names of the communities they serve during an EAS activation. State and Local Area identifications must be given as provided in State and Local Area EAS Plans.
- (2) Analog and digital broadcast stations are exempt from complying with §§73.62 and 73.1560 of this chapter (operating power maintenance) while operating under this part.

- (3) The time of receipt of the EAN shall be entered by analog and digital broadcast stations in their logs (as specified in §§73.1820 and 73.1840 of this chapter), by analog and digital cable systems in their records (as specified in §76.1711 of this chapter), by subject wireless cable systems in their records (as specified in §21.304 of this chapter), and by all other EAS Participants in their records as specified in §11.35(a).
- (b) EAS Participants originating emergency communications under this section shall be considered to have conferred rebroadcast authority, as required by section 325(a) of the Communications Act of 1934, 47 U.S.C. 325(a), to other EAS Participants.
- (c) During a national level EAS emergency, EAS Participants may transmit in lieu of the EAS audio feed an audio feed of the President's voice message from an alternative source, such as a broadcast network audio feed.
- 22. Amend § 11.55 by revising paragraph (a) introductory text, paragraph (c) introductory text, and paragraphs (c)(3), (4), (7), and (8) and add paragraph (d) to read as follows:

# § 11.55 EAS operation during a State or Local Area emergency.

(a) The EAS may be activated at the State and Local Area levels by EAS Participants at their discretion for day-today emergency situations posing a threat to life and property. Examples of natural emergencies which may warrant state EAS activation are:

Tornadoes, floods, hurricanes, earthquakes, heavy snows, icing conditions, widespread fires, etc. Man-made emergencies warranting state EAS activation may include: toxic gas leaks or liquid spills, widespread power failures, industrial explosions, and civil disorders.

\* \* \* \* \*

(c) Immediately upon receipt of a State or Local Area EAS message that has been formatted in the EAS Protocol, EAS Participants participating in the State or Local Area EAS must do the following:

\* \* \* \* \*

- (3) Participating National (PN) sources monitor the Local Area LP sources for instructions.
- (4) EAS Participants participating in the State or Local Area EAS must discontinue normal programming and follow the procedures in the State and Local Area Plans.

  Analog and digital television broadcast stations must transmit all EAS announcements visually and aurally as specified in §11.51(a) through (e) and 73.1250(h) of this chapter, as applicable; analog cable systems, digital cable systems, and wireless cable systems must transmit all EAS announcements visually and aurally as specified in §11.51(g) and (h); and DBS providers must transmit all EAS announcements visually and aurally as specified in §11.51(j). EAS Participants providing foreign language programming should transmit all EAS announcements in the same language as the primary language of the EAS Participant.

\* \* \* \* \*

- (7) The times of the above EAS actions must be entered in the EAS Participants' records as specified in §§11.35(a) and 11.54(a)(3).
- (8) Use of the EAS codes or Attention Signal automatically grants rebroadcast authority as specified in §11.54(b).

- (d) Immediately upon receipt of a State or Local Area EAS message that has been formatted in the Common Alerting Protocol, EAS Participants must do the following:
- (1) EAS Participants participating in the State or Local Area EAS must follow the procedures in for processing such messages in the State and Local Area Plans.
- (2) Analog and digital television broadcast stations must transmit all EAS announcements visually and aurally as specified in §11.51(a) through (e) and 73.1250(h) of this chapter, as applicable; analog cable systems, digital cable systems, and wireless cable systems must transmit all EAS announcements visually and aurally as specified in §11.51(g) and (h); and DBS providers must transmit all EAS announcements visually and aurally as specified in §11.51(j). EAS Participants providing foreign language programming should transmit all EAS announcements in the same language as the primary language of the EAS Participant.
- (3) Resume normal operations upon conclusion of the message.
- (4) The times of the above EAS actions must be entered in the EAS Participants' records as specified in §§11.35(a) and 11.54(a)(3).
- 23. Revise § 11.56 to read as follows:

#### § 11.56 Obligation to Process CAP-Formatted EAS Messages.

- (a) On or by June 30, 2012, EAS Participants must have deployed operational equipment that is capable of the following:
- (1) Acquiring EAS alert messages in accordance with the monitoring requirements in §11.52(d)(2);

(2) Converting EAS alert messages that have been formatted pursuant to the (i) "Common Alerting Protocol Version 1.2" (July 1, 2010), and (ii) "Common Alerting" Protocol, v. 1.2 USA Integrated Public Alert and Warning System Profile Version 1.0" (Oct. 13, 2009), into EAS alert messages that comply with the EAS Protocol, such that the Preamble and EAS Header Codes, audio Attention Signal, audio message, and Preamble and EAS End of Message (EOM) Codes of such messages are rendered equivalent to the EAS Protocol (set forth in §11.31), in accordance with the technical specifications governing such conversion process set forth in the "ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0" (May 17, 2010) (except that any and all specifications set forth therein related to using text-to-speech technology and gubernatorial "must carry" shall not be followed); and (3) Processing such converted messages in accordance with the other sections of this part. (b) EAS Participants may comply with the requirements of this section by deploying an Intermediary Device. If an EAS Participant elects to meet the requirements of this section by deploying an Intermediary Device, it shall be required to construct visual messages from CAP-formatted EAS messages in accordance with §3.6 of the "ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0" (May 17, 2010), as set forth in §§11.51(d), (g)(3), (h)(3), and (j)(2) of this part, on or by June 30, 2015. (c) The standards required in this section are incorporated by reference into this section with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Federal Communications Commission must publish notice of change in the Federal Register and the material must be available to the public. All approved material is available for

inspection at the Federal Communications Commission, 445 12th Street, SW., Washington, DC (Reference Information Center) and is available from the sources indicated below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to

http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

- (1) The following standard is available from the EAS-CAP Industry Group (ECIG), 21010 Southbank Street, #365, Sterling, VA, 20165, go to http://www.eas-cap.org.
- (i) "ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0" (May 17, 2010).
- (ii) [Reserved].
- (2) The following standards are available from Organization for the Advancement of Structured Information Standards (OASIS), 25 Corporate Drive Suite 103, Burlington, MA 01803-4238, call 781-425-5073, or go to http://www.oasis-open.org.
- (i) "Common Alerting Protocol Version 1.2" (July 1, 2010).
- (ii) "Common Alerting Protocol, v. 1.2 USA Integrated Public Alert and Warning System Profile Version 1.0" (Oct. 13, 2009).
- 24. Amend § 11.61 by revising paragraphs (a) introductory text, (a)(1)(i), (a)(2)(ii) and (b) to read as follows:

#### § 11.61 Tests of EAS procedures.

- (a) EAS Participants shall conduct tests at regular intervals, as specified in paragraphs (a)(1) and (a)(2) of this section. Additional tests may be performed anytime. EAS activations and special tests may be performed in lieu of required tests as specified in paragraph (a)(4) of this section.
- (1)\*\*\*
- (i) Tests in odd numbered months shall occur between 8:30 a.m. and local sunset. Tests in even numbered months shall occur between local sunset and 8:30 a.m. They will originate from Local or State Primary sources. The time and script content will be developed by State Emergency Communications Committees in cooperation with affected EAS Participants. Script content may be in the primary language of the EAS Participant. These monthly tests must be transmitted within 60 minutes of receipt by EAS Participants in an EAS Local Area or State. Analog and digital class D non-commercial educational FM, analog and digital LPFM stations, and analog and digital LPTV stations are required to transmit only the test script.

\* \* \* \* \*

- (2) \* \* \*
- (ii) DBS providers, analog and digital class D non-commercial educational FM stations, analog and digital LPFM stations, and analog and digital LPTV stations are not required to transmit this test but must log receipt, as specified in §11.35(a) and 11.54(a)(3).

\* \* \* \* \*

(b) Entries shall be made in EAS Participant records, as specified in §11.35(a) and 11.54(a)(3).

# The following appendix will not be published in the Code of Federal Regulations.

#### Appendix A

#### Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated into the Third Further Notice of Proposed Rulemaking (<u>Third FNPRM</u>) in this proceeding. The Commission sought written comment on the proposals in the <u>Third FNPRM</u>, including comment on the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

#### A. Need for, and Objectives of, the Fifth Report and Order

- 2. This <u>Fifth Report and Order</u> adopts changes to the Commission's Part 11 rules governing the Emergency Alert System (EAS) to codify the obligation to process alert messages formatted in the Common Alerting Protocol (CAP) and to streamline and clarify these rules generally to enhance their effectiveness.
  - 3. Specifically, the <u>Fifth Report and Order</u>:
  - Clarifies that the scope of the CAP-related obligations addressed in this order are
    limited to those necessary to ensure that CAP-formatted alert messages distributed to
    EAS Participants will be converted into and processed in the same way as messages
    formatted in the current EAS Protocol.
  - Amends § 11.56 of the Commission's rules to require EAS Participants to convert
     CAP-formatted EAS messages into messages that comply with the EAS Protocol
     requirements, following the procedures for such conversion set forth in the EAS-CAP
     Industry Group's (ECIG) ECIG Implementation Guide.

- Amends § 11.52 of the Commission's rules to require that EAS Participants monitor
   FEMA's Integrated Public Alert and Warning System (IPAWS) for federal CAP-formatted alert messages using whatever interface technology is appropriate.
- Order) in this docket regarding receipt of CAP-formatted messages from Next

  Generation EAS delivery systems was intended to put EAS Participants on notice that, should FEMA adopt technical standards covering delivery of CAP-formatted messages to EAS Participants over specific platforms, such as satellite systems, EAS Participants would ultimately need to configure their systems to be able to interface with such systems to meet their existing obligation to process CAP-formatted messages.
- Permits EAS Participants to use intermediary devices to meet their CAP-related obligations, provided that all intermediary devices must provide that capability of utilizing the enhanced text in a CAP message to meet the visual display requirements in section 11.51(d), (g)(3), (h)(3), and (j)(2) of the Commission's rules, as set forth in section 3.6 of the ECIG Implementation Guide, by June 30, 2015.
- Declines to make any changes to the minimum encoder requirements set forth in section 11.32(a) regarding CAP-to-EAS Protocol conversion.
- Revises the input and output configuration requirements in §§ 11.32(a)(2) and (a)(3) of the Commission's rules to require at least one audio port and at least one data port, and to delete references to RS232-C and 1200 baud rate.
- Revises the minimum requirements for decoders in section 11.33(a) to include the capability to decode CAP-formatted messages and convert them into EAS Protocol-

- compliant messages, as set forth in section 11.56 and clarifies that this requirement can be met through the deployment of an intermediary device.
- Revises the input and output configuration requirements in §§ 11.33(a)(1) and (a)(7) of the Commission's rules to require at least one audio port and at least one data port, and to delete references to RS232-C and 1200 baud rate.
- Amends section 11.33(a)(4) of the Commission's rules to include selective display
  and logging of text that was compiled from CAP-formatted messages be added to the
  EAS device log.
- Declines to revise § 11.33(a)(10) of the Commission's rules to require processing of
  CAP-formatted message by default when duplicate messages are received in both the
  EAS Protocol and CAP formats, as recommended in the Communications Security,
  Reliability, and Interoperability Council (CSRIC) Final Report (CSRIC Final
  Report).
- Revises section 11.33(a)(11) of the Commission's rules to ensure that Emergency
   Action Notification (EAN) messages receive priority over all other EAS messages,
   regardless of whether the EAN message was received via the audio port or data port,
   or was formatted in EAS Protocol or CAP.
- Declines to revise section 11.1 of the Commission's rules to include new CAPrelated alert originators, as recommended in the <u>CSRIC Final Report</u>.
- Revises the text of § 11.11(a) of the Commission's rules to include as a minimum requirement compliance with the CAP-related requirements in § 11.56 of the Commission's rules, and to delete the reference to "analog television broadcast stations."

- Revises the equipment deployment tables in § 11.11 of the Commission's rules by adding a footnote to the "EAS decoder" entries in the tables to clarify that the obligation to receive and translate CAP-formatted messages may be met by deploying an intermediary device, and by deleting the date references in the equipment deployment tables in section 11.11 (as well as cross-references to these dates in other sections of Part 11, such as section 11.51(c) and (d)), along with the entry for two-tone encoders. Declines to incorporate references to the monitoring requirements in section 11.52 in section 11.11.
- Declines to revise the language of § 11.20 of the Commission's rules to require a specific reference to CAP alerts, CAP relay networks, or CAP monitoring requirements.
- Revises § 11.21(a) of the Commission's rules to make clear that the State EAS Plans specify the monitoring assignments and the specific primary and backup path for EAS Protocol-formatted EANs and that the monitoring requirements for CAP-formatted EANs are set forth in section 11.52, and to make clear that to the extent a state may distribute CAP-formatted EANs to EAS Participants via its state alerting system, its State EAS Plan must include specific and detailed information describing how such messages will be aggregated and delivered, just as it must for state CAP-formatted non-EAN messages.
- Defers taking any action with respect to revising § 11.21(c) of the Commission's
  rules until, at a minimum, review of the test data received from EAS Participants as a
  result of the November 9, 2011, nationwide EAS test has been completed.
- Declines to revise the language in § 11.31(a) of the Commission's rules to better reflect CAP's capabilities.

- Amends sections 11.35(a) and (b) of the Commission's rules to clarify that these
  subsections apply to all equipment used as part of the EAS, including all equipment
  that performs the functions of decoding and encoding messages formatted in the EAS
  Protocol and the Common Alerting Protocol.
- Declines to revise § 11.45 of the Commission's rules to prohibit CAP messages lacking "Actual" status indicators, as recommended in the <u>CSRIC Final Report</u>.
- Declines to revise § 11.51 of the Commission's rules to require EAS Participants to transmit (or "render") a CAP-compliant message, as recommended in the <u>CSRIC</u> <u>Final Report</u>.
- Amends sections 11.51(d), (g)(3), (h)(3), and (j)(2) of the Commission's rules to require EAS Participants to derive the visual display elements, including the originator, event, location and the valid time period of the EAS message, from the CAP text data as described in section 3.6 of the ECIG Implementation Guide (intermediary devices must provide for such functionality by June 30, 2015).
- Declines to revise section 11.54(b) of the Commission's rules to mandate that CAPformatted messages be broadcast only if the scope of the alert is "Public," and to
  include IPAWS monitoring, as recommended in the <u>CSRIC Final Report</u>.
- Clarifies that it would be inappropriate to adopt any form of blanket exemption from
  the basic obligations of monitoring for, receiving, and processing CAP-formatted
  messages, but concludes that the physical unavailability of broadband Internet service
  offers a presumption in favor of a waiver.
- Incorporates conformance with the ECIG Implementation Guide into the Commission's existing certification scheme.

- Amends section 11.55 of the Commission's rules to eliminate the requirement that EAS Participants receive and transmit CAP-formatted messages initiated by state governors.
- Amends the procedures for processing EANs set forth in § 11.54 of the Commission's rules and related Part 11 rule sections so that EAS Participants process EANs like any other EAS message, only on a mandatory and priority basis. To effect these changes, deletes §§ 11.16, 11.42, 11.44, 11.53, 11.54(a), (b)(1)-(8), (b)(10), (b)(12) and (c) of the Commission's rules, as well as the Emergency Action Termination (EAT) event code.
- Eliminates Non-Participating National (NN) deleting references to status, and in this
  regard, revise sections 11.18, 11.41, 11.54, and 11.55 of the Commission's rules to
  remove references to NN status, and deletes section 11.19 altogether.
- Seeks comment on whether the option for EAS Participants to manually process
   EANs (but not state or local EAS messages) should be eliminated.
- Defers taking any action with respect to the EAS Operating Handbook until, at a minimum, review of the test data received from EAS Participants as a result of the November 9, 2011, nationwide EAS test has been completed.
- Revises section 11.11(a) of the Commission's rules to remove the references therein
  to "participating broadcast networks, cable networks and program suppliers; and
  other entities and industries operating on an organized basis during emergencies at
  the National, State and local levels."
- Revises the definition for LP-1 station in § 11.2(b) of the Commission's rules to
   reflect that these stations can be a radio or TV station.

- Deletes § 11.14 of the Commission's rules.
- Revises section 11.2(a) to delete the numerical reference to the actual number of
  Primary Entry Point (PEP) stations in existence, and to clarify that PEP stations
  distribute EAS messages in accordance with the EAS Protocol requirements in
  section 11.31.
- Deletes section 11.13 of the Commission's rules and folds the definition for the EAN currently in section 11.13 into section 11.2.
- Revises §§ 11.31 and 11.34(d) of the Commission's rules to replace the references to the Federal Information Processing Standard (FIPS) numbers with references to the American National Standards Institute (ANSI) Codes INCITS 31.200x (Formerly FIPS 6-4), Codes for the Identification of Counties and Equivalent Entities of the United States, its Possessions, and Insular Areas standard.
- Revises the analog and digital broadcast station equipment deployment table in § 11.11(a) of the Commission's rules so that "LPFM" and "LPTV" are identified with the columns listing the requirements for those categories, and revises §§ 11.61(a)(1)(i) and 11.61(a)(2)(ii) of the Commission's rules to include "LPFM" stations.
- Revises section 11.32(a)(9)(iv) of the Commission's rules to limit the duration of the Attention Signal to no more than eight seconds, and deletes as obsolete sections 11.33(b) and 11.12.
- Clarifies that EAS Participants may relay, for the benefit of downstream monitoring stations, messages they received that did not include an End of Message (EOM) code within the reset time limit set on their decoder.

- Declines to revise § 11.33(a)(3)(ii) of the Commission's rules to eliminate the
  requirement to delete messages upon expiration of their time periods, thus allowing
  EAS Participants to air alert messages after expiration of the effective time period set
  by the alert message originator.
- Reiterates that the Commission lacks the authority to raise or distribute funds for EAS-related purposes and therefore cannot provide training for state and local emergency managers.
- Observes that the decision to require EAS Participants to meet the video display requirements in section 11.51(d), (g)(3), (h)(3), and (j)(2) by using the enhanced text in the CAP message, as outlined in the ECIG Implementation Guide, will help harmonize the EAS rules with the requirements of section 79.2.
- Identifies several proposals raised in the comments submitted in response to the
   <u>Third FNPRM</u> as being outside the scope of the <u>Third FNPRM</u> and thus not taken up
   by the Fifth Report and Order.

## B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

- 4. SBA filed no comments in this proceeding, and there were no other comments specifically addressed to the IRFA.
  - C. Description and Estimate of the Number of Small Entities to Which Rules
    Will Apply
- 5. The RFA directs agencies to provide a description of and, where feasible, an estimate of, the number of small entities that may be affected by the rules adopted herein. The RFA generally defines the term "small entity" as having the same meaning as the terms "small

business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).

- 6. Small Businesses, Small Organizations, and Small Governmental Jurisdictions.

  The Commission's action may, over time, affect small entities that are not easily categorized at present. The Commission therefore describe here, at the outset, three comprehensive, statutory small entity size standards. First, nationwide, there are a total of approximately 27.5 million small businesses, according to the SBA. In addition, a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."

  Nationwide, as of 2007, there were approximately 1,621,315 small organizations. Finally, the term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand." Census Bureau data for 2011 indicate that there were 89,476 local governmental jurisdictions in the United States. The Commission estimates that, of this total, as many as 88, 506 entities may qualify as "small governmental jurisdictions." Thus, the Commission estimates that most governmental jurisdictions are small.
- 7. Television Broadcasting. The SBA defines a television broadcasting station as a small business if such station has no more than \$14.0 million in annual receipts. Business concerns included in this industry are those "primarily engaged in broadcasting images together with sound." The Commission has estimated the number of licensed commercial television stations to be 1,390. According to Commission staff review of the BIA Kelsey Inc. Media Access Pro Television Database (BIA) as of January 31, 2011, 1,006 (or about 78 percent) of an estimated 1,298 commercial television stations in the United States have revenues of \$14 million

or less and, thus, qualify as small entities under the SBA definition. The Commission has estimated the number of licensed noncommercial educational (NCE) television stations to be 391. The Commission notes, however, that, in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations must be included. The Commission's estimate, therefore, likely overstates the number of small entities that might be affected by its action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. The Commission does not compile and otherwise does not have access to information on the revenue of NCE stations that would permit it to determine how many such stations would qualify as small entities.

- 8. In addition, an element of the definition of "small business" is that the entity not be dominant in its field of operation. The Commission is unable at this time to define or quantify the criteria that would establish whether a specific television station is dominant in its field of operation. Accordingly, the estimate of small businesses to which rules may apply do not exclude any television station from the definition of a small business on this basis and are therefore over-inclusive to that extent. Also, as noted, an additional element of the definition of "small business" is that the entity must be independently owned and operated. The Commission notes that it is difficult at times to assess these criteria in the context of media entities and its estimates of small businesses to which they apply may be over-inclusive to this extent.
- 9. Radio Stations. The rules and policies adopted in the Fifth Report and Order potentially will apply to all AM and FM radio broadcasting applicants, and proponents for new FM allotments, who qualify for the Tribal Priority adopted in the First Report and Order in this proceeding. The "Radio Stations" Economic Census category "comprises establishments primarily engaged in broadcasting aural programs by radio to the public. Programming may originate in their own studio, from an affiliated network, or from external sources." The SBA has established a small business size standard for this category, which is: such firms having \$7

million or less in annual receipts. According to BIA/Kelsey, MEDIA Access Pro Database on January 13, 2011, 10,820 (97%) of 11,127 commercial radio stations have revenue of \$7 million or less. Therefore, the majority of such entities are small entities. The Commission notes, however, that in assessing whether a business concern qualifies as small under the above size standard, business affiliations must be included. In addition, to be determined to be a "small business," the entity may not be dominant in its field of operation. The Commission notes that it is difficult at times to assess these criteria in the context of media entities, and its estimate of small businesses may therefore be over-inclusive.

- defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies." The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. According to Census Bureau data for 2007, there were a total of 955 firms in this previous category that operated for the entire year. Of this total, 939 firms had employment of 999 or fewer employees, and 16 firms had employment of 1000 employees or more. Thus, under this size standard, the majority of firms can be considered small entities.
- 11. <u>Cable System Operators (Rate Regulation Standard)</u>. The Commission has developed its own small business size standards, for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers, nationwide. Industry data indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard. In addition, under the Commission's rules, a "small system" is a

cable system serving 15,000 or fewer subscribers. Industry data indicate that, of 7,208 systems nationwide, 6,139 systems have under 10,000 subscribers, and an additional 379 systems have 10,000-19,999 subscribers. Thus, under this second size standard, most cable systems are small and may be affected by the rules adopted in the <u>Fifth Report and Order</u>.

- standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000." The Commission has determined that an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate. Industry data indicate that, of 1,076 cable operators nationwide, all but ten are small under this size standard. The Commission notes that it neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million, and therefore it is unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.
- established in 1996, and is one of four statutorily recognized options for the provision of video programming services by local exchange carriers. The OVS framework provides opportunities for the distribution of video programming other than through cable systems. Because OVS operators provide subscription services, OVS falls within the SBA small business size standard covering cable services, which is "Wired Telecommunications Carriers." The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. According to Census Bureau data for 2007, there were a total of 3,188 firms in this previous category that operated for the entire year. Of this total, 3,144 firms had

employment of 999 or fewer employees, and 44 firms had employment of 1000 employees or more. Thus, under this size standard, most cable systems are small and may be affected by the rules adopted in the <u>Fifth Report and Order</u>. In addition, we note that the Commission has certified some OVS operators, with some now providing service. Broadband service providers ("BSPs") are currently the only significant holders of OVS certifications or local OVS franchises. The Commission does not have financial or employment information regarding the entities authorized to provide OVS, some of which may not yet be operational. Thus, again, at least some of the OVS operators may qualify as small entities.

14. Wired Telecommunications Carriers. The 2007 North American Industry Classification System ("NAICS") defines "Wired Telecommunications Carriers" as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services; wired (cable) audio and video programming distribution; and wired broadband Internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry." The SBA has developed a small business size standard for wireline firms within the broad economic census category, "Wired Telecommunications Carriers." Under this category, the SBA deems a wireline business to be small if it has 1,500 or fewer employees. Census data for 2007, which supersede data from the 2002 Census, show that 3,188 firms operated n 2007 as Wired Telecommunications Carriers. 3,144 had 1,000 or fewer employees, while 44 operated with more than 1,000 employees.

## 15. Broadband Radio Service and Educational Broadband Service (FCC Auction

Standard). The established rules apply to Broadband Radio Service ("BRS," formerly known as Multipoint Distribution Systems, or "MDS") operated as part of a wireless cable system. The Commission has defined "small entity" for purposes of the auction of BRS frequencies as an entity that, together with its affiliates, has average gross annual revenues that are not more than \$40 million for the preceding three calendar years. The SBA has approved this definition of small entity in the context of MDS auctions. The Commission completed its MDS auction in March 1996 for authorizations in 493 basic trading areas. Of 67 winning bidders, 61 qualified as small entities. At this time, the Commission estimates that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent BRS licensees that are considered small entities. After adding the number of small business auction licensees to the number of incumbent licensees not already counted, the Commission finds that there are currently approximately 440 BRS licensees that are defined as small businesses under either the SBA or the Commission's rules. In 2009, the Commission conducted Auction 86, which offered 78 BRS licenses. Auction 86 concluded with ten bidders winning 61 licenses. Of the ten, two bidders claimed small business status and won 4 licenses; one bidder claimed very small business status and won three licenses; and two bidders claimed entrepreneur status and won six licenses.

Educational Broadband Service ("EBS," formerly known as Instructional Television Fixed Service, or "ITFS") facilities operated as part of a wireless cable system. The SBA definition of small entities for pay television services, Cable and Other Subscription Programming, also appears to apply to EBS. There are presently 2,032 EBS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in the definition of a small business. However, the Commission does not collect annual revenue data for EBS licensees and is not able to ascertain how many of the 100 non-educational licensees would be

categorized as small under the SBA definition. Thus, the Commission tentatively concludes that at least 1,932 are small businesses and may be affected by the rules and policies adopted in the Fifth Report and Order.

- 17. Wireless Telecommunications Carriers (except Satellite). Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category. Prior to that time, such firms were within the now-superseded categories of "Paging" and "Cellular and Other Wireless Telecommunications." Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees. For the category of Wireless Telecommunications Carriers (except Satellite), Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year. Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small. Similarly, according to Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (PCS), and Specialized Mobile Radio (SMR) Telephony services. Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees. Consequently, the Commission estimates that approximately half or more of these firms can be considered small. Thus, using available data, the Commission estimates that the majority of wireless firms can be considered small.
- 18. <u>Incumbent Local Exchange Carriers (LECs)</u>. The Commission has included small incumbent LECs in this IRFA analysis. As noted above, a "small business" under the RFA is one that, <u>inter alia</u>, meets the pertinent small business size standard (<u>e.g.</u>, a telephone communications business having 1,500 or fewer employees) and "is not dominant in its field of operation." The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope. The

Commission has therefore included small incumbent local exchange carriers in this RFA analysis, although the Commission emphasizes that this RFA action has no effect on its analyses and determinations in other, non-RFA contexts. Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 1,303 carriers have reported that they are engaged in the provision of incumbent local exchange services. Of these 1,303 carriers, an estimated 1,020 have 1,500 or fewer employees, and 283 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by the rules and policies adopted in the Fifth Report and Order.

Service Providers," and "Other Local Service Providers." Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications

Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.

According to Commission data, 769 carriers have reported that they are engaged in the provision of either competitive access provider services or competitive local exchange carrier services. Of these 769 carriers, an estimated 676 have 1,500 or fewer employees, and 93 have more than 1,500 employees. In addition, 12 carriers have reported that they are "Shared-Tenant Service

Providers," and all 12 are estimated to have 1,500 or fewer employees. In addition, 39 carriers have reported that they are "Other Local Service Providers." Of the 39, an estimated 38 have 1,500 or fewer employees, and one has more than 1,500 employees. Consequently, the

Commission estimates that most providers of competitive local exchange service, competitive access providers, "Shared-Tenant Service Providers," and "Other Local Service Providers" are

small entities.

- 20. <u>Satellite Telecommunications Providers</u>. Two economic census categories address the satellite industry. The first category has a small business size standard of \$15 million or less in average annual receipts, under SBA rules. The second has a size standard of \$25 million or less in annual receipts.
- 21. The category of Satellite Telecommunications "comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications." Census Bureau data for 2007 show that 512 Satellite Telecommunications firms that operated for that entire year. Of this total, 464 firms had annual receipts of under \$10 million, and 18 firms had receipts of \$10 million to \$24,999,999. Consequently, the majority of Satellite Telecommunications firms can be considered small entities.
- 22. The second category, <u>i.e.</u> "All Other Telecommunications" comprises "establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems.

  Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry." For this category, Census Bureau data for 2007 show that there were a total of 2,383 firms that operated for the entire year. Of this total, 2,347 firms had annual receipts of under \$25 million and 12 firms had annual receipts of \$25 million to \$49, 999,999. Consequently, the Commission estimates that the majority of All Other Telecommunications firms are small entities that might be

affected by the rules and policies adopted in the Fifth Report and Order.

23. Direct Broadcast Satellite ("DBS") Service. DBS service is a nationally distributed subscription service that delivers video and audio programming via satellite to a small parabolic "dish" antenna at the subscriber's location. DBS, by exception, is now included in the SBA's broad economic census category, "Wired Telecommunications Carriers," which was developed for small wireline firms. Under this category, the SBA deems a wireline business to be small if it has 1,500 or fewer employees. To gauge small business prevalence for the DBS service, the Commission relies on data currently available from the U.S. Census for the year 2007. According to that source, there were 3,188 firms that in 2007 were Wired Telecommunications Carriers. Of these, 3,144 operated with less than 1,000 employees, and 44 operated with more than 1,000 employees. However, as to the latter 44 there is no data available that shows how many operated with more than 1,500 employees. Based on this data, the majority of these firms can be considered small. Currently, only two entities provide DBS service, which requires a great investment of capital for operation: DIRECTV and EchoStar Communications Corporation ("EchoStar") (marketed as the DISH Network). Each currently offers subscription services. DIRECTV and EchoStar each report annual revenues that are in excess of the threshold for a small business. Because DBS service requires significant capital, the Commission believes it is unlikely that a small entity as defined by the SBA would have the financial wherewithal to become a DBS service provider.

## D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

- 24. There are revisions to current Part 11 reporting, recordkeeping, or compliance requirements set forth in the Fifth Report and Order. Specifically, the Fifth Report and Order:
  - Revises section 11.21(a) to make clear that the State EAS Plans specify the
     monitoring assignments and the specific primary and backup path for SAME-

formatted EANs. This revision merely applies a current reporting requirement to a new technical protocol and the Commission does not expect it to alter the reporting burden to any appreciable degree. The revision will ensure the accuracy of EAS operational documents and thus contributes to public safety. Accordingly, the Commission believes the revision to be necessary.

- Revises section 11.33(a)(4) to require that if an alert message is derived from a CAP-formatted message, the contents of the text, assembled pursuant to ECIG Implementation Guide, should be added to the EAS device log. This revision merely applies a current reporting requirement to a new technical protocol and the Commission does not expect it to alter the reporting burden to any appreciable degree.
- Eliminates Non-Participating National source (NN) status and thus deletes all references to NN status from section 11.41 (and other sections) of the Part 11 rules. Obtaining NN status required the submission of paperwork to the FCC, thus, eliminating such status eliminates a potential paperwork requirement. Because NN stations were otherwise required to meet the same logging and reporting requirements of non-NN stations, the elimination of this status did not impact other logging or reporting requirements to which NN stations are subject.
- Deletes section 11.42 in its entirety, which set forth certain reporting requirements
  for common carrier stations involved in national level EAS operations. Like all of
  the provisions in section 11.42, the provisions related to common carriers facilitated
  EAS operations that were phased out in 1995. Accordingly, deleting section 11.42
  formally eliminates reporting requirements that were effectively eliminated long ago.
- Revises section 11.54(b)(13) to eliminate the requirement that EAS Participants enter into their logs/records the time of receipt of EAT messages during a national level

- emergency. This action is necessary because the <u>Fifth Report and Order</u> eliminates the EAT from the Part 11 rules, and incrementally lessens the logging/recording requirements associated with EANs.
- Revises section 11.55 section to clarify that the time of receipt of CAP-formatted emergency alert messages must be entered into the stations/systems' logs/records. The requirement in section 11.55 directing stations/systems to enter into their logs/records the time of receipt of an emergency alert message already broadly applies to any emergency alert message, regardless of how it is formatted; this revision merely makes this point clearer.
- Adopts, in paragraphs 164-167, 170-171 and 175-176, streamlined procedures for equipment certification that take into account standards and testing procedures adopted by FEMA. This revision merely applies a current certification requirement to equipment that complies with a new technical protocol and the Commission does not expect it to alter the certification burden to any appreciable degree.
- 25. These requirements are intended to advance our public safety mission and enhance the performance of the EAS while reducing regulatory burdens wherever possible.
  - E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered
- 26. The RFA requires an agency to describe any significant alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of

the rule, or any part thereof, for such small entities."

- 27. EAS Participants currently are required to receive and process CAP-formatted alert messages, as set forth in section 11.56. The Fifth Report and Order adopts dozens of revisions to Part 11 of the Commission's rules that are necessary in order for EAS Participants to meet this obligation and, more generally, to streamline and make more efficient the operation of the EAS. The majority of the rule revisions are not designed to introduce new obligations that do not already exist, but rather, more clearly identify and effect within Part 11 the CAP obligations previously adopted in the Second Report and Order. In many cases, the rule revisions eliminate or reduce recordkeeping and reporting requirements. In all instances, the Commission chose the least costly, technically feasible option. In this regard, these revisions are designed to minimally impact all EAS Participants, including small entities, to the extent feasible, while at the same time protecting the lives and property of all Americans. This confers a direct benefit on small entities. For example, the rule revisions maintain the existing EAS architecture and permit affected parties to meet their CAP-related obligations via intermediary devices, which potentially may alleviate the need to obtain new EAS equipment for many EAS Participants. Similarly, the revisions to EAN processing make the Part 11 rules simpler both to understand and implement within equipment designs.
- 28. Removing redundant or obsolete sections from the EAS rules not only streamlines EAS operation, but also decreases costs to all involved in the functioning of the EAS. Moreover, the CAP-related amendments that the Commission makes to its EAS rules are designed to minimize costs. For example, the <u>Fifth Report and Order</u> removes the obligation to receive and process CAP-formatted alerts messages initiated by state governors. This will eliminate the costs of upgrading EAS equipment to comply with this requirement.
- 29. Commenters were invited to suggest steps that the Commission may take to further minimize any significant economic impact on small entities. When considering proposals

minimizing the impact on small entities. Virtually all commenters agreed that incorporation of CAP into the Part 11 rules will significantly benefit both public safety officials and the public by creating a more efficient, reliable and effective EAS. The new rules require EAS Participants to monitor FEMA's IPAWS system for federal CAP-formatted alert messages using whatever interface technology is appropriate. This approach marks an alternative from the Commission's proposal in the <a href="https://doi.org/10.1007/jhapanes/">Third FNPRM</a> and is in response to comments received in response to the <a href="https://doi.org/10.1007/jhapanes/">Third FNPRM</a> and is in response to comments received in response to the <a href="https://doi.org/10.1007/jhapanes/">Third FNPRM</a> that advocated for more flexibility for this requirement. Moreover, the new rules permit, with certain limitations, EAS Participants to use intermediary devices to meet their CAP-related obligations. The approach taken in the <a href="https://doi.org/">Fifth Report and Order</a> strikes a balance by allowing use

made by other parties, commenters were also invited to propose alternatives that serve the goal of

30. **Report to Congress:** The Commission will send a copy of the <u>Fifth Report and Order</u>, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act. In addition, the Commission will send a copy of the <u>Fifth Report and Order</u>, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the <u>Fifth Report and Order</u> and FRFA (or summaries thereof) will also be published in the Federal Register.

of these devices by EAS Participants – many of whom are small or are non-commercial – but

is a significantly less costly alternative to requiring immediate compliance.

only to the extent such devices can comply with the rules adopted today by June 30, 2015. This

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